

WINNING THE HUNDRED BATTLES:  
CHINA AND ASYMMETRIC WARFARE

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## ABSTRACT

WINNING THE HUNDRED BATTLES: CHINA AND ASYMMETRIC WARFARE,  
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The term asymmetric warfare is comparatively new in Chinese defense circles, and it is often used in reference to the US. Yet China has a long theoretical and historical tradition of seeking asymmetric responses to strategic challenges throughout its past and present. This tradition continues to the present as can be seen in Chinese responses to the 1979 Vietnam incursion, the Taiwan Straits, and dealing with American military power.

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## ACRONYMS

AWACS	Airborne Warning and Control System
ASEAN	Association of Southeast Asian Nations
CCP	Chinese Communist Party
CPV	Chinese People's Volunteers
CNP	Comprehensive National Power
EMP	Electromagnetic Pulse
FBIS	Foreign Broadcast Information Service
FRY	Former Republic of Yugoslavia
MTR	Military-Technical Revolution
PLA	People's Liberation Army, the armed forces of the People's Republic of China
PRC	People's Republic of China
RMA	Revolution in Military Affairs
US	United States
UN	United Nations

## CHAPTER 1

### INTRODUCTION

Attack him where he is not prepared; go by way of places where it would never occur to him you would go. These are the military strategist's calculations for victory.<sup>i</sup>

Sun Tzu

非 同 小 可 or *buduichen zhanzheng* is one of the words in Chinese for asymmetric warfare. The first character, 非 , is a negation. The second character, 同 , means to face or mirror. The final character, 可 , means to fit or match. The last two characters mean war. So a direct translation of asymmetric in Chinese means “warfare of non-matching facets.” However, this definition does not capture the idea of asymmetric warfare in Chinese writings. The word itself has other translations that provide a different nuance depending on which is used. One Chinese author Kang Hangzhen evaluates the term “asymmetrical strategy,” asserting that “Its asymmetrical state refers to the use of different ways to secure an upper hand over the adversary.”<sup>ii</sup> Kang goes on to refine this definition stating, “Asymmetry is an abnormal logical thinking that brings together the two sides that pit against each other”<sup>iii</sup>--a reference to using the dialectic to find a solution to a problem. Kang's definition is less than clear to most Western readers; as a result, one must examine the Western conception of asymmetry and then see if the idea translates into Chinese.

Many Chinese military thinkers see the idea of asymmetric warfare as a new, American conception of war, but as this paper will show, “warfare of non-matching facets” is, in fact, an appropriate term for describing how the military thinkers of the People's Liberation Army (PLA) have fought past wars and may fight in future wars to

be successful. This raises the question, that if the concept of asymmetric war is a familiar approach to prosecuting Chinese wars, why Chinese strategic culture adopted this approach. To understand how and why the PLA approaches warfare, we must understand what it understands as its place in the world. If in turn, one is to successfully understand this aspect of Chinese military thought, it will be of great service in understanding the Chinese approach to warfare. It will also increase understanding of the theory and practice of asymmetric warfare in China -- in the words of Sun Tzu, "He who knows the enemy and himself will never in a hundred battles be at risk."<sup>iv</sup>

The People's Republic of China (PRC) is a rising great power. The past twenty-one years of economic development have left it materially richer, ranking as the world's second largest economy by some measures. It is only natural that a rising great power would want to use some of this newly developed wealth to enhance its national security. China's geographic location is intrinsically vulnerable and China's recent history has been fraught with repeated conflict on China's periphery. The quest to enhance national security would ostensibly dictate that some of this new economic power should be translated into military capability. The unfortunate fact for the PRC is that although it has greatly developed its economy, its domestic imperatives such as an under-funded pension system, a debt-burdened banking system, and keeping state owned enterprises afloat continue to absorb a great deal of this wealth. China's military still has to operate on relatively limited budgets, especially in comparison with the great powers like Japan or India that reside on its periphery. China's solution has been to avoid the temptation to be strong everywhere and instead she has developed specific strengths to place against her potential adversaries' weaknesses. The People's Liberation Army, the armed forces of the



PRC, has come to spend more of its time and money developing capabilities that seem to be asymmetrical in relation to the capabilities of neighboring states and other possible threats.

### Research Question

This thesis will focus on examining the question of whether or not the Chinese PLA is developing asymmetric warfare capabilities and if so, what are the characteristics of these asymmetric capabilities. In the process of answering this question, several secondary questions have to be addressed. First, one must define the meaning of asymmetric in reference to military capability. Second is an examination of China's regional threat perception. Third, is an analysis of how the PLA seeks to militarily deal with these threats. Finally, one must ask what the term "Asymmetric Warfare" means to Chinese strategists. This last question will allow the reader to then understand the facets of the primary question: Is it China's modus operandi to develop asymmetric responses to threats and, if so, how does this shape the Chinese efforts to modernize their force, doctrine, and conceptions of war?

### Assumptions

Perhaps the major assumption being made in this research project is that the conception of asymmetry and its application to strategy and tactics is not the same for the US and China. When US military thinkers discuss the concept, the thoughts and concepts that form in their minds are not the same as those that would form in the mind of strategists and officers in the PRC because China's military traditions are derived from a very different historical and cultural experience.

## Definitions

There are three terms in this paper that will require definition because of contention regarding their definitions in Western circles. One is the Revolution in Military Affairs (RMA), the second is Military-Technical Revolution (MTR) and the third is Asymmetric Warfare. The last of these terms will be examined within the body of the thesis in greater depth as it is fundamental to the logic trail of Chinese force development; however, a brief overview of all three is provided below.

The term and scope of an RMA and whether one is, in fact, ongoing are both topics of hot debate in the US. Analysis of this debate is beyond the scope of this paper, so for simplicity's sake, the following definition is offered: a RMA can be defined as a historical moment in which changes in technology, doctrine, and organization combine to create completely new ways of waging wars. An unfortunate characteristic of RMAs is that frequently they are not immediately obvious to those who are in their midst. Moreover, the RMA may, and at times does create problems that are seemingly intractable to the combatants. RMAs tend to be wrenching moments for status quo powers that have relied on old paradigms for developing their forces, be it the Roman Legionnaires at Adrianople or Imperial Hapsburg troops at Breitenfeld. The new paradigm creates asymmetries between the capabilities of the forces that have adjusted to it and those that have not.

An MTR also reflects a fundamental change in warfare, but it is best understood in contrast to an RMA. While an RMA will alter warfare across the breadth of its nature, an MTR is merely a technological breakthrough that while fundamentally changing an aspect of war does not change its nature or its conduct. Advances in tank gunnery after

the Second World War would be one example of an MTR that was not an RMA. Sabot rounds, gun stabilization, and improved optics fundamentally improved the lethality of the tank without changing the ways tank warfare was conducted. The introduction of jet engines into combat aircraft would be another example of an MTR.

The US Army's FM 3-0, *Operations*, describes asymmetry as follows:

“Asymmetry concerns dissimilarities in organization, equipment, doctrine, capabilities, and values between other armed forces (formally organized or not) and US forces.”<sup>v</sup> It expands on this definition by discussing the application of Asymmetric Warfare stating, “asymmetric warfare seeks to avoid enemy strengths and concentrate comparative advantages against relative weaknesses.”<sup>vi</sup> These definitions of military asymmetry and asymmetric warfare are good working definitions, but they will be dealt with in more depth later in the paper.

### Limitations

This paper will use public information that is available through the Combined Arms Research Library (CARL), electronic databases, and translations provided on the Foreign Broadcast Information Service (FBIS). Where possible, information on attitudes and ideas will be drawn from primary sources. This is somewhat problematic when dealing with Chinese sources for a couple of reasons: first, in order to work in primary Chinese sources, a high level of fluency is necessary to understand literary flourishes, allusions, and classical characters not used in contemporary Mandarin-Chinese language. The second reason is that due to the muted and secretive nature of debates in the arena of all Chinese government affairs, especially those pertaining to national security, finding

credible sources can be difficult. An additional limitation is the relatively short period of time allotted for research.

### Delimitations

This study will address the conception of asymmetry in China and attempt to determine whether or not it is a significant factor in the development of forces. The study will specifically examine changes in China's conventional forces that seem to be driven by a desire to create an asymmetric advantage. Due to the broad nature of Chinese modernization and change, this paper will look at three examples of the Chinese working in the asymmetric realm that illustrate this predilection: (1) reaction to the 1979 Vietnam Incursion, (2) response to the Taiwan Straits standoff and (3) coping with US power.

### Background and Significance of Study

Soldiers are often accused of preparing for the last war. A further trap for American officers in preparing for the next war is that their last three wars in Iraq, Yugoslavia, and Afghanistan were quite successful. This has discouraged a great deal of thinking that challenges the current establishment. American forces have focused on refining the components of their military power such as technology, precision attack, and global reach that have provided them with such success in the past. In contrast, the Chinese military establishment has been unnerved by the outcomes of the past three American wars. This, in turn, has driven a debate in the PLA of how best to deal with a powerful and technologically advanced opponent.

Does the PLA focus on the US? While reviewing Chinese literature, a reader runs across a great many more articles regarding the US than any other country. Why does the PLA spend so much time and energy focusing on the United States? This same reader

could put forward three reasons: first, US forces are the current benchmark of excellence. U.S forces are widely seen as the best organized and most technologically advanced armed forces on the planet. The second reason is that US forces and concepts have been extensively tested in combat for the past twelve years in Iraq, Yugoslavia, and Afghanistan. The third reason is that the US is quite possibly one of the opponents that the PLA perceives it may have to face in the near term in the context of Taiwanese independence or reunification.

The US decisive victory in the Gulf War precipitated a great deal of alarm and soul-searching in the PLA. The air war in Kosovo in 1999 further honed this discomfort and the outcome of the Afghan War will likely have a similar impact. In all of these wars the Chinese military establishment forecast different outcomes than those that came to pass.<sup>vii</sup> Although the predicted outcome was not always an American defeat, the ease of the victories was startling to Chinese observers. This American experience has forced Chinese thinkers to spend a great deal of time reconsidering their assumptions about the nature of modern war. Some of the PLA's preconceptions have derived from simple wishful thinking: the Chinese had desired that the paradigm under which they had developed their army for the past decade still held valid.

One may ask why the Chinese would be concerned with their military capability as they have not fought a war in over two decades. The reason lies in the PRC's development. China is an emerging great power and sees the Western Pacific as its natural sphere of influence. The difficulty lies in that the US already plays the role of the region's preeminent great power and is loathe to suffer the emergence of a regional competitor or hegemon. Nor does this cursory analysis of China's western Pacific

interests include the perceived objectives and roles of Japan, Russia or India. The Chinese clearly have some national objectives that run counter to the interests of the other powers in the region such as the possible forcible reunification with Taiwan, control of the Spratly Islands, and the neutralization of Japanese power in the face of incipient (in the Chinese view) re-militarization of Japan. Unfortunately, China currently lacks the military capability to successfully prevail in any of these scenarios.

This situation of needing military power, but having an apparently inadequate force is somewhat problematic for the Chinese. The very existence of the Communist Party may depend on the successful resolution of any crisis. To understand this we must quickly examine from whence the Chinese Communist Party (CCP) derives its legitimacy to rule. Historically, communism has founded its legitimacy on the Marxist dialectic and its recognition of the proletariat's key role in society. However, in the wake of the Cold War, it became manifest that an autarkic command economy could not generate the wealth to compete with market-capitalist economies. It is generally agreed that China's leaders observed the growing disparity between command and market systems and began liberalizing their economy through the 1980s. This effectively led to the abandonment of Marx's dialectic and the primacy of the proletariat as wellsprings of political legitimacy.

Instead, the CCP has founded its legitimacy and prestige on the dual pillars of economic development and nationalism. China has clearly abandoned communism in favor of a socialist adaptation of market capitalism; however, this system is a dual-edged sword. In times of growth the economy is much more vibrant and productive than under a command economy, but in times of recession the market is hard on the manual laborer who comprises the majority of China's workforce. China does not have the "safety valve"

of democracy to vote out politicians who pursue painful or unpopular programs. China's economic growth has slowed down from the years of the 1980s and some scholars believe that it is far lower than the official growth rate of around seven percent.<sup>viii</sup> China's entry into the World Trade Organization and concomitant opening for imports is and will likely hobble the ability of Chinese bureaucracy to use tariffs and licensing fees to regulate the access of foreign companies in the Chinese marketplace.<sup>ix</sup> These trends could undermine the stability of the economic pillar of power.

This situation leaves nationalism as the main source of legitimacy for the Party in wake of Marxist-Leninism's marginalization and potential economic slowdown. This means that in the near term if China has to make a stand on an identified national objective, it may be the Party's legitimacy itself that is on the line. It is a vital interest of the Party and thus of the state that it must achieve any stated national objectives even if this leads into an avoidable war. Any defeat on a stated national objective would directly undermine the Party's credibility as the sole political entity able to look after the nation's interest. This, in turn, would undermine the stated basis of its monopoly on power. It is not enough to fight; the PRC must win any military confrontation.

There are many possible military crises that could come to a head over the next two decades, some more likely than others. The spectrum runs from attempts to counter Taiwanese independence to a desire to control the Spratly Island chain. Conflicts in these areas could bring the PRC into confrontation with another great power. So, in the near term, how can the PRC hope to compete militarily with a great power in a regional crisis? It must find a way to successfully balance or deter the overwhelming military power of the US, Japan, or Russia (in Chinese eyes).<sup>x</sup> For China to accomplish this goal by

developing the traditional venues of military power, would take decades. This “danger zone” of time requires Chinese thinkers to identify opponents’ relative vulnerabilities that can be attacked with current capabilities to achieve the desired effect. After identifying this weakness, the PLA must enhance its strength in these fields in order to magnify effects to ensure success. This process is the crux of “asymmetric warfare” as defined in US doctrine.

It is crucial for the US and allied nations to study the concept and application of asymmetry in Chinese thought because of China’s position. Moreover, there is great utility in examining how others approach and solve problems. It often gives one insight into methods that he might not have otherwise tried. This study is designed to investigate these areas and see how the PLA solves the problems and utilizes the opportunities presented by the changing times in which we live.

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<sup>i</sup>Sun Tzu, *The Art of Warfare*, trans. Roger Ames (New York: Ballantine, 1993), 104.

<sup>ii</sup>Kang Hengzhen, “Article on Asymmetrical War Strategy, US Forces’ Application of strategy in Combined Operations” *Beijing Zhongguo Junshi Kexue*. 20 Jun 02. 70-76 (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP20030306000241. 6 Mar 2003.

<sup>iii</sup>Ibid.

<sup>iv</sup>Sun Tzu, *The Art of War*.113.

<sup>v</sup>US Army, FM 3-0, *Operations* (Washington, D.C: Department of the Army, 2001), 4-31.

<sup>vi</sup>Ibid.

<sup>vii</sup>David Shambaugh, “China’s Military Views the World: Ambivalent Security,” *International Security* 24 (Winter 1999): 58-59.



<sup>viii</sup>Thomas G. Rawski, *Measuring China's Recent GDP: Where Do We Stand?*  
<http://www.pitt.edu/~tgrawski/papers2002/measuring.pdf> 24 Sep 2001 [15 Jan 03].

<sup>ix</sup>Joe Studwell, *The China Dream: The Quest for the Last Great Untapped Market on Earth* (New York: Atlantic Monthly Press, 2002), 265.

<sup>x</sup>Michael Pillsbury, *China Debates the Future Security Environment*, (Washington, D.C: National Defense University Press, 2000) 159.

## CHAPTER 2

### REVIEW OF LITERATURE

The first part of this literature review looks at some key sources from which theoretical models or key information are drawn. Within this first part, there are three main subtopics that must be examined in order to analyze Chinese asymmetric developments: the first is a review of Chinese views on its current security environment in order to establish whose weaknesses Chinese military thinkers are seeking to exploit. The second subtopic of the overall review is the Chinese definition of what asymmetric warfare is, how the Chinese perceive it, and a review of its facets. The final sub-topic is a look at PLA force development and an analysis of Chinese responses to the outcome of the Vietnam Incursion, the Taiwan Straits standoff, and dealing with US power. In the second part of the review, I will examine the types of literature with which I deal. In the third and final part, the quality and bias of the various sources are examined.

For obtaining the Chinese world view or their perception of international conflict, several books are of great use. First, we must have a model of how the Chinese perceive state-state interactions work. Michael Swain and Ashley Tellis lay out an admirable framework for Chinese perception of state interactions, which looks very similar to the western theory of Realism.<sup>xi</sup> For theoretical frameworks of the international arena that lend useful, predictive analysis there are two prominent books. The first is Samuel Huntington's *Clash of Civilizations* and the second is John Mearsheimer's *The Tragedy of Great Power Politics*. Both books make compelling and cogent arguments on the relationship between rising and status quo powers. These both provide a framework that Westerners can relate to and also have a strong similarity to the Chinese worldview laid

out by Swaine and Tellis. The second task is to take this perception of state-state interactions and use it to see how the Chinese perceive their strategic situation. Michael Pillsbury's *China Debates the Future Security Environment* is a good starting point as it lays out the systematic framework that many of the important Chinese research institutes use to evaluate the world situation.

Interestingly, most Chinese sources credit the idea of asymmetric warfare as being American in origin and something that Americans are particularly adept at applying. The idea itself is frequently not broached by its Western nomenclature in Chinese, but rather is an underlying pattern of thinking that is visible in the way China has developed its strategic concepts through the centuries. In the US, there has been much written about asymmetric warfare recently, albeit much of it with conflicting definitions. Two excellent articles can be found in the July-August 2001 issue of *Military Review*. One article written by Steven Metz discusses several facets of asymmetry and lays out several different types of asymmetry. It is an excellent article for purposes of conceptually reviewing the concept. Another article by Colin Gray in the same issue discusses the semantic validity of describing warfare as asymmetric. These articles taken together with US doctrine form a good basis for reviewing the concept. On the Chinese side, the book *Unlimited Warfare*, by Qiao Liang and Wang Xiaosui, received positive reviews in Chinese periodicals and at least represents one school of thought in Chinese strategic circles. The book advocates attacking an enemy across the spectrum of his national power, not only striking his military forces, but also attacking his economic, informational, and political sinews of power. There are also many newspaper articles in Chinese periodicals

emphasizing asymmetric approaches to warfare. Taken together, this corpus of knowledge is an adequate base on which to begin examination.

Finally, concerning Chinese force development, there are several useful articles that have been published in the last five years. There is Tim Thomas' examination of Chinese Information Warfare: "Like Adding Wings to the Tiger: Chinese Information War Theory and Practice." For force structure, David Shambaugh has written several useful articles in the *The China Quarterly* over the past several years as have Nan Li, June Teufel Dreyer, and Ellis Joffe. Finally, *Jane's Defence Weekly* has several short but important synopses on evolving Chinese capabilities.

Taken together, these three areas provide a large amount of data. The reliability of US and European sources is generally high, but usually based on secondary sources. There is less than unequivocal confidence in the reliability of Chinese documents as they traditionally do not cite other sources and may or may not authoritatively represent PLA and Chinese government policy. The greatest difficulty in knowing the true direction of Chinese strategic thought lies in the fact that Chinese articles and interviews lack context due to the opaqueness of the Chinese defense establishment. In the words of Ellis Joffe, one of the most experienced researchers on the Chinese military, "The quest becomes . . . a matter of 'seeking the truth from unavailable facts.'"<sup>xii</sup>

In this study, there are generally four different sources of literature in Chinese security policy that originate from China: government documents, think tank products, newspaper articles, and interviews. The reliability of government documents is generally the highest amongst Chinese documents. If it is published by the official government, it has generally received the review and approval of the various involved agencies. Second

in reliability are think tank documents, they often originate from the very highest levels from their various agencies. Unfortunately, the various agencies within the CCP and government do not always agree with each other and thus each agency's bias colors the research.<sup>xiii</sup> An example of this is the various formulas that different think tanks use to arrive at their calculation of "Comprehensive National Power."<sup>xiv</sup> Third in reliability are newspaper articles. In China, newspaper articles likely carry more weight than a similar article in the US. This is due to the lack of a free press and the presence of censorship in China. If it is published in the media, it has been sanctioned by at least parts of the government. The final tier of data originates from interviews between Western researchers and their Chinese counterparts. The weakness here is that these interviews are often either "non-attributional" or "off the record." Even putting aside this ambiguity for the moment, it is often a single individual's view which, in the end, may lose out in bureaucratic infighting. Very few Chinese policy makers can speak with the authority of assured acceptance of their viewpoint within Communist Party struggles. This lack of unequivocal authority runs all the way up to the Politburo standing committee.

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<sup>xi</sup>Ashley Tellis and Michael Swaine, *Interpreting China's Grand Strategy*, (Santa Monica, CA: Rand Corporation, 2000), 208.

<sup>xii</sup>James Mulvenon and Bates Gill, "Chinese Military-Related Think Tanks and Research Institutions." *The China Quarterly* 171. (Sept 2002): 617.

<sup>xiii</sup>Both Glaser and Saunder's article as well as Pillsbury's discuss this particular difficulty.

<sup>xiv</sup>Michael Pillsbury, *China Debates the Future Security Environment*, (Washington, D.C: National Defense University Press, 2000), 203-256.

## CHAPTER 3

### RESEARCH METHODOLOGY

In approaching the topic, a qualitative analysis of historical precedent and current force development in China is used to examine the topic itself. Inductive observation of the data derived from the qualitative analysis is used in order to attempt to discern a pattern to Chinese approaches to warfare and force development. Due to the secretive nature of debate on national security subjects in China, inductive examination of many resources is likely more reliable than deduction as the veracity of any one source is always questionable. Thus building an argument with one key source as the cornerstone creates a vulnerability in the argument as its reliability is always suspect. Using the weight of several sources produces a much more confident thesis.

In doing the research for the topic, first a library search was conducted in the Combined Arms Research Library (CARL) at the Command and General Staff College. This was supplemented with both internet searches and a search of the Foreign Broadcasting Information Service (FBIS) in an attempt to find original source documents that had been translated into English. Next, an attempt was made to investigate their footnotes of documents in scholarly, English-language sources. Finally, conversations and interviews with several more established scholars in the field of PLA force development were utilized. Taken together, these sources equal the sum of the research effort put forward on this paper.

This study examines the Chinese conception of asymmetric warfare in four major steps. First, there is an analysis of China's perception of its strategic environment. After establishing a theoretical framework to explain how Chinese leaders think and act within

the international environment, this framework is then used to deduce or directly cite China's perception of threat. Finally, the nature of the threat is examined.

The second step is a discussion of the concept of asymmetry. The thesis first shows the current conception of asymmetry in US military thought. It next uses an American framework of asymmetry to provide a standard for determining whether or not the Chinese are developing asymmetric capabilities. The thesis then attempts to establish that the Chinese do not think of "asymmetry" as a specific or unique type of war. Finally Chinese articles and commentaries are used to demonstrate that Asymmetric War as a proper noun is relatively new to Chinese thought, but as a descriptor of a style of warfare it is as old as China itself.

This leads to the third step, which briefly looks at China's lengthy historical experience to see possible expressions of asymmetric warfare in China's military tradition. While China has not specifically referred to "asymmetry" as a style of war, its history is replete with examples of asymmetric warfare and some of its most important expressions of strategic thought emphasize and value the concept. This step will examine both traditional military theory and actual historical events. Together, these will show a clear continuity of asymmetric thought.

Finally, the thesis use examples to demonstrate how China developed an asymmetric response when confronted with a strategic challenge. It describes the genesis of the problem, the Chinese analysis, and the adopted strategy. All three of these case studies will be from the post-1949 security environment and, in fact, are from the post-Mao period. The purpose is to show that the trend towards asymmetric solutions is both

current and ongoing. In this way, attempt is made to provide empirical evidence to validate the assertions put forth in parts two and three.



## CHAPTER 4

### ANALYSIS

#### Worldview

How does the People's Republic of China see the world that it lives in? The question is directly pertinent to the concept of asymmetric warfare. In order to develop its force structure to deal with possible opponents, a state must have a perception of the security environment in which it finds itself. After a thorough analysis of this environment, a state tries to develop forces and a strategy that maximizes its security at the least cost.

This quest for security is a careful balancing act, because most modern states recognize a linkage between economic wealth and the ability to generate military power. Modern militaries are capital intensive and expensive to train and maintain. The tempo of modern war dictates that great powers maintain large standing armies. If a modern state relies too heavily on reserve forces or light forces, it opens itself to the possibility of grievous damage by a better-equipped and prepared state as it wastes time trying to mobilize and generate adequate combat power in the face of a superior foe. This imperative for a large, standing army must be balanced by the recognition that building too strong a force can actually diminish a state's security for two reasons. First, the development of a strong military is likely to frighten a state's neighbors, causing them to build up their own forces in an effort to increase their own security. Second, a burden on the state's economic prosperity is created as it converts its economic power into military power--the classic guns versus butter conundrum. In some systems, the imbalance can

become great enough as to undermine the state's ability to create wealth, as was the case of the Soviet Union.

So, with the above balance in mind, states must thoughtfully apply their resources so as to answer perceived threats. Looking at how the PRC views the world, it is clear that the PRC has seemingly adopted the Western view of the state as the key actor on the world stage and with the highest level of sovereignty.<sup>xv</sup> Chinese authors see the world as moving from an era of bipolar competition during the Cold War to an increasing trend towards multipolarity.<sup>xvi</sup> In the rise of alternate poles of power, the United States' power will decline in relation to the other emerging powers as they catch up in development. The Chinese perceive that they themselves are one of the rising great powers. Of the other rising powers, three are situated on the periphery of the PRC: Japan, Russia, and India. Chinese analysts also assume that the U.S. will continue as the final pole.<sup>xvii</sup>

To judge the relative power of various states and have an understanding of China's capability vis-a-vis the other poles, the Chinese academic community has assessed the relative strengths of the various powers through a formula known as Comprehensive National Power (CNP). This idea of mathematically analyzing power was originally developed in the West but has been highly refined by the Chinese from the 1980s onward. The concept of CNP takes into account both constant and variable factors. An example of one of the "constants" of CNP calculation is natural resources. Some of the variables include military and foreign affairs capability. This formula's inputs vary between the various governmental think tanks in China but broadly speaking, all emphasize similar aspects of national power such as political power, economic power, science and technology, military strategy, military power, and other such groupings.<sup>xviii</sup>

Within this framework, one of the PRC's main goals is "To safeguard world peace and oppose aggression and expansion."<sup>xix</sup> The explanation of this goal goes on to state that the PRC will use all means necessary to resist the attempt of any other power to expand its power base, especially at China's expense. China sees the relations between these poles as being predicated on power relationships. To provide itself with the secure environment it desires, the PRC will seek to develop its own comprehensive national power components and will attempt to find ways to offset the strength of other great powers' CNP components. As a significant part of the CNP formulas rely on military and technological prowess, China will strenuously attempt to develop its own military and military technology while developing means to offset the military-technical strengths of the other powers.

#### Threat Perception.

What is a threat? Most states perceive a threat to be a state or non-state entity with the ability to attack and diminish one or more of a state's sources of power. Whether this threat is grave and could threaten the existence of a state ( e.g., the loss of population or territory through war) or minor (such as the loss of credibility in being unable to live up to the stipulations of a treaty) it is still something that most states will reflexively attempt to counter.

The Chinese assume that in the future, wars will be fought as the great powers compete for military and CNP superiority. This will lead to an increase in local wars, generally on the peripheries of spheres of influence.<sup>xx</sup> The majority of these local wars are likely to take place in two general areas: Africa and Central Asia.<sup>xxi</sup> It is assumed that a great many of these will potentially involve the US as it strives to maintain the

transitory unipolar world of the late twentieth and early twenty-first centuries.

Furthermore, the Chinese will also have to deal with US “helpers” such as Japan and NATO. The ongoing rise of a potentially militant and unstable (read “democratic”) India into the ranks of the great powers is also of great concern to Chinese thinkers. The combination of this incipient security competition and its scale gives some urgency to China’s current policy of peaceful development as it seeks to increase its variable CNP components and military power.

The Chinese face four imperatives in preparing for this new era. First, the PRC must use this opportunity to peacefully develop before competition between the emerging poles forces it to devote more of its resources to the military. This explains the emphasis on “peaceful development” in China’s last two *Defense White Papers*. Second, China must identify the zones of conflict and potential adversaries. The third step is to identify the sources of an opponent’s power. Finally the PRC must develop a means to attack these components of other powers’ CNP.

All four steps are specific to whatever opponent the PRC is planning to counter. However, the focus of this paper is to examine the fourth step, developing the means to attack the opponent’s sources of power--especially the military one. As one looks at the final step, one consistent theme in Chinese writings is that the best way of confronting an opponent is the proven “Tactic of Combining Tactics.” This is a fairly timeless stratagem that is one of China’s 36 Stratagems and consists of using a combination of various tactics to deal with an adversary. This is the very technique espoused by Senior Colonels Qiao Liang and Wang Xiangsui in their book *Unrestricted Warfare*.<sup>xxii</sup> In this book, the authors make a strong case for attacking an opponent’s ability to wage war across the

spectrum of its components of CNP. This may range from an attack on an enemy's financial system to directly attacking his armed forces. Traditionally in the West, attacks on another nation involve a direct conventional military attack--the sort of attack that the PRC with its poor logistics and power projection capability has been in a poor position to execute.

However, Chinese analysts perceive that there is an ongoing Revolution in Military Affairs (RMA), which will provide new ways to attack the military component of an opponent's CNP.<sup>xxiii</sup> These new capabilities also have the advantage of being unanticipated by the adversary due to their recent development. These "magic weapons" or "trump cards"<sup>xxiv</sup> are anticipated to be weapons for use at the critical point in battle that will provide Chinese forces with the initiative.

### Grappling with Giants

The PRC's emphatic stated goal in the near-term is the continuation of its peaceful development.<sup>xxv</sup> However, planning for a peaceful near term is not the same as actually having a peaceful international environment. All strategists must consider worst-case scenarios and the Chinese are no different. This being the case, if this peaceful environment fails to materialize, one must ask how China intends to deal with superior military power of its possible opponents. China may be confronted with one of two different scenarios: war with another great power or with a smaller nation on its periphery. If the Chinese have to face a great power in the near term (ten to twenty years) they will likely be at a technological disadvantage excepting a conflict with India. This analysis applies both in terms of military technology and CNP. The second possibility is conflict on its borders with a less developed power such as Vietnam or the Philippines. In this

case, the Chinese would likely be able to field technologically superior forces. Obviously, the two scenarios would require different modes of warfare. Chinese strategists are aware of this and are tailoring forces, doctrine, and equipment to deal with each possibility. In the former case of a great power conflict, China must find a way to offset the opponent's strength through adoption of a stratagem minimizing the impact of an opponent's technology; while in the latter case, it would likely resort to a superior technology or capability itself. In deciding whether this approach is asymmetric, asymmetry must be specifically defined.

#### Asymmetry with Chinese Characteristics

It will argued that in tailoring its forces, the PLA seeks to create asymmetric capabilities to face the challenges it faces. A "capability" is merely an inherent ability to carry out a given mission or task. Initially, the definition of the word "capability" must be considered. In the context of stratagems, a capability does not necessarily need to be a concrete piece of military hardware. It can be a more abstract ability, such as officers trained to use the dialectic in analyzing a problem or perhaps a military and general populace steeled to accept disproportionately heavy casualties. Conversely, it might be a specific weapon system or organization developed with a specific purpose in mind.

If this is the meaning of "capability," then one must next define the meaning of an "asymmetric capability." As noted above, the US Army's FM 3-0 describes asymmetry as follows: "Asymmetry concerns dissimilarities in organization, equipment, doctrine, capabilities, and values between other armed forces (formally organized or not) and US forces."<sup>xxvi</sup> It further describes Asymmetric Warfare stating, "asymmetric warfare seeks to avoid enemy strengths and concentrate comparative advantages against relative

weaknesses.”<sup>xxvii</sup> While this is a good descriptor, it does not go into adequate depth in developing the idea of asymmetric war into a useful, specific framework with characteristics for comparison.

There are several good articles in Western literature that try to identify and describe asymmetric warfare. Two of the better ones were written by Steven Metz and Colin Gray. Both articles are well thought out; however, their emphasis is slightly different. Gray’s article tends to focus on irregular forces, such as terrorist organizations adopting strategies that are outside the pale of expectation. He goes on to describe the ways in which these threats emerge and how they are dealt with. Conversely, Steven Metz in his article “Strategic Asymmetry” talks more of asymmetry in a state-state context. For the context of this paper, Metz’s article is more applicable. However, Gray does establish one key factor in asymmetry that is critical. He states, “Asymmetric threats work by challenging successfully our ability to respond effectively.”<sup>xxviii</sup> If one conjoins this idea with Metz’s view below and FM 3-0’s definition, one begins to see that a key element of asymmetry is expectation. In the application of asymmetric warfare one side creates a specific strength and places it against a relative weakness that his opponent does not anticipate or cannot react to. If it is the latter, the opponent would surely have recognized it and avoided the asymmetry that he was unable to counter, so it is most likely the former case in which either it or its success is unanticipated.

Taking this idea of expectation and adding it to the ideas laid forth by Metz, who applies Ockham’s Razor<sup>xxix</sup> to arrive at an even simpler definition of asymmetry: “Strategic asymmetry uses some sort of difference to gain advantage over an adversary”<sup>xxx</sup> He goes on to posit that most asymmetries are applied at the operational

level of warfare. He presents six major forms of asymmetry: asymmetric methods involving different operational concepts, asymmetric technologies, asymmetries of will, normative asymmetries that spring from dissimilar value systems, asymmetries of organization, and asymmetries of patience.

In contrast to being a new idea, creating asymmetry is in fact, the crux of the contemporary style of American warfare. The goal is to find an enemy's weakness and create a strength to place against it in order to dislocate the enemy's ability to fight. Successfully applied asymmetric warfare can rob an opponent of the initiative and in more extreme cases, create a psychological shock that enables the user to retain the operational and strategic initiative. A classic example of asymmetric warfare was the Japanese attack on the US Pacific fleet in Pearl Harbor in 1941. Prior to this attack, both Japanese and American military planners foresaw any conflict in the Pacific as eventually being resolved in a Mahanian fleet action in which the battleships of the two antagonists would slug it out for control of the sea-lanes. This conception of how a war in the Pacific would unfold vanished the day Japanese carrier-based planes destroyed the flower of the American fleet in Battleship Row. Ironically, the Japanese initially did not seem to recognize that they had changed the paradigm for naval warfare. The Japanese had created a strength, local carrier superiority, and placed it against an American weakness, the consolidated anchorage of the American Pacific Fleet, thus achieving a shock that would allow the Japanese to retain the strategic initiative until the Battle of Midway. The Japanese used an asymmetry of method.

So the next question to ask is whether the Chinese think in terms of "asymmetric warfare" as defined in the West. The *1999 English-Chinese, Chinese-English Dictionary*



*of Military Terms*, is a dictionary put out by the National Defense Publishing Bureau in China. It is a tool for Chinese military officers to both translate their concepts into English or to translate English works into Chinese. The word “asymmetry” is not to be found in the dictionary.<sup>xxx</sup> While there are many military-technical terms in the English language that would not be included in a standard dictionary, a military dictionary would certainly be expected to contain these terms, especially if it is a strategic concept that is a critical component of formulating doctrine. This absence is balanced by the presence of the word in older, more extensive military dictionaries published in the 1980’s.

Another place to look for the term is in current writings on the subject. There are a growing number of articles published on the mainland that discuss military asymmetry. In these venues, there seems to be one main term that is used: that, as mentioned above, is 不对称 or *buduichen zhanzheng*. The importance of etymology in Chinese characters cannot be overstated. Oftentimes, the characters that are used will connote an important nuance that allows for a more accurate translation of the term and an understanding of the context in which it is used.

The term *buduichen zhanzheng* can be broken down as follows: the first character, 不, is a negation. The second character, 对, means to “face or mirror.” The final character, 称, means to “fit or match.” The last two characters mean war. So the direct translation of asymmetric in Chinese means “non-matching facets.” The term 不对称 *zhanzheng*, is the Chinese word for war. So this term literally translates into “war with non-matching facets.” This term also has an alternate permutation of 不对称 or *feiduichen zhanzheng*. In this case, the substitution of 非 (*fei*) for 不 (*bu*) is not significant;

it is merely a more formal form of negation that better fits the tenor of academic writing.

There are many examples of this usage; one comes from an article published in the internal Chinese news digest that is provided for the members of the Chinese government.

The article is titled “America’s New ‘National Security Strategy’ and the Current International Situation.” In it the author states:

If we attempt a broad explanation of the concept of “asymmetric (*buduichen*) warfare,” the present writer believes that there are three implications to the idea of “asymmetry”: asymmetry in electronic information technology and the ability to control it; asymmetry in military technology; and asymmetry in economic resources and military industries and their capabilities.<sup>xxxii</sup>

Although the translator chose to use the term “implication” in his translation, the writer actually chose the character ? *ceng*, which perhaps more accurately translates as “level.”

This implies that the word can be used at different levels of war--here referring to different levels of warfare. Another example of the word in another periodical with a different author has a larger operational and strategic implication:

In future conventional wars, reliance on technical measures to obtain dissymmetric (*feiduichen*) battlefield information (and preventing the opponent from obtaining sufficient battlefield information) will to a very great extent decide whether or not a country can change a war into an asymmetric war favorable to that side. And being able to obtain dissymmetric battlefield information can not only lead to victory in a war, it can also be helpful in preventing a conflict from starting. Thus, a country’s industrial development in aspects of this issue, not only bears a relationship to a country’s standing in the worldwide industrial competition, even more so it bears a relationship to national security, a matter of life and death for a country.<sup>xxxiii</sup>

So it can be seen that this word focuses on a conception of capabilities and is used on a theoretical basis for organizing the underlying structure of an idea into something that can be understood--an understanding of the word much closer to that of Metz’s.

Using this term, Kang Hengzhen emphasizes that asymmetry is really an aspect of the dialectic: if a strategist perceives a strength, he must look for the antithesis of this

strength and bring it to bear. His quote, “Asymmetry is an abnormal logical thinking that brings together the two sides that pit against each other,”<sup>xxxiv</sup> is a statement of this concept. He asserts that this is nothing special, but rather the result of applying logic and creativity to a problem. Indeed he goes on to declare, “Without a doubt, asymmetrical wars account for most of the wars fought by the human race.”<sup>xxxv</sup> Asymmetry is not special but instead is a result of disciplined application of the dialectic.

The key inference we should draw is that the term “asymmetric” was not a commonly used term within Chinese military and academic circles. In fact, the word asymmetry itself is treated with some curiosity in Chinese writings as it seems to be perceived as an American concept. Writer Zhu Xiaoning published an article in Beijing PLA Daily, stating, “Since the end of the 1991 Gulf War, *the US military has set forth the theory of ‘asymmetrical operations.’*”<sup>xxxvi</sup> (emphasis added) Another article from earlier in the year, published in the same paper, states, “*The US army attaches great importance to the study of the theory on asymmetrical operations.*” Both *their* combined-arms operations guide and services operations regulations have placed special emphasis on “asymmetrical operations.” (emphasis added)<sup>xxxvii</sup>

Chinese thinking, in contrast to Western writing, tends to be more numerological but less definitive. In Western academic writings, scholars seek to define, agree upon, and then use terms on the basis of a common understanding of an agreed upon definition. Chinese writings overflow with lists of the “three essentials” or “four no’s” or the 36 Stratagems; however, the definitions are less fixed. Indeed, Chinese authors tend to expect and encourage less definitive, more flexible definitions. This idea is reinforced in the popular, recent book, *Unrestricted Warfare*, written by two PLA colonels:

No matter how clear we state the side-principal rule or the rule of victory, we can only proceed with the application of the rule in a fuzzy way. Sometimes, being fuzzy is the best way of reaching clarity. For only fuzziness is good for being grasped in an overall manner. This is the Eastern style of thinking.<sup>xxxviii</sup>

A superior intellect should not be challenged in grappling with the vagaries of these sorts of definitions. Chinese culture is permeated with the idea of the “superior man.” Ideas and strategies that would be challenging for most people are intuitively obvious to the superior man. This is a key concept dating back to both the idea of the Mandate of Heaven being transferred to revolutionaries who had an innate understanding of the needs of the people as well as some of the Confucian scholars of the Ming dynasty such as Wang Yangming. With the assumption of implicit understanding, the explicit definition of terms and doctrines are unnecessary and even useless. If it is not intuitively understood, explicit explanation will not be useful.

Between these two points--nonconformity of terms used in articles and the perception of “asymmetric warfare” as a US conception--we have to ask if perhaps the Chinese don’t conceive of war in the same way. Although the Chinese have only recently begun talking about “Asymmetrical War” as a proper noun--that is a specific and unique style of warfare--Chinese strategic culture has a long tradition of asymmetry. It can be argued that US writers have become too enamored with the term itself. It litters current American military literature, portrayed as a new and somewhat insidious style of warfare. Some Western writers have sought to quantify and define the various types of “asymmetry” following a strong human instinct to categorize.<sup>xxxix</sup> Yet we must ask what is to be gained by the categorization? People categorize that which they observe, in order to give it a structure and coherence so they can intellectualize it and discuss it in the

abstract. However, the import of the term itself is only to highlight the underlying conception. Because another culture does not categorize and discuss the term in the same way we do, that does not mean they have not intellectualized it in their own manner. So, although PLA writers may treat the term as a curiosity and a particularly US conception, the understanding of asymmetric warfare posited above--to develop a strength to place against an enemy's weakness--is very much both a traditional and contemporary style of Chinese warfare.

It is, in fact, the primary style and there is a continuity in Chinese strategic thought and military philosophy that extends back into antiquity. Chinese history is replete with examples of the various forms of asymmetry laid out by Metz. The Chinese historical record is somewhat unique in world history because it extends back in time for almost 3200 years. Across this vast stretch of time, Chinese feudal states and then the country as a whole has often been confronted with powerful enemies that were a threat to their very existence, usually in the form of the powerful nomadic horse tribes to their north. In this context, the skill of discerning and exploiting an enemy's weakness was frequently a matter of national survival. The continuity of China as a political and cultural entity allowed the lessons learned in these struggles to be captured and built upon creating a strategic continuity unparalleled in the world.

For a historical perspective on asymmetry in Chinese military theory, we can go back to the wellsprings of Chinese strategic thought. Two fundamental sources of Chinese strategic thought are the well known *Art of War* written by Sun Wu (known by his honorific, Sun Tzu, in the West) in the mid-fifth century B.C. and the 36 Stratagems,

a collection of military anecdotes collected over several centuries from 400 B.C. to 800 B.C. that often are used to illustrate strategic conceptions today.

Sun Tzu's *Art of War* is a seminal work in Chinese military thought. Although written in antiquity, it held a position of primacy in the military throughout the Chinese Imperial era all the way into the early Twentieth Century. In book one of *Art of War*, Sun Tzu urges the reader to, "Attack where he [the enemy] is not prepared; go by way of places where it would never occur to him you would go. These are the military strategist's calculations for victory--they can not be settled in advance."<sup>xi</sup> Another passage of note: "Just as the flow of water avoids high ground and rushes to the lowest point, so on the path to victory avoid the enemy's strong points and strike where he is weak."<sup>xii</sup> As both of these passages illustrate, one of Sun Tzu's major themes is creating and placing your strength against an enemy's weakness. This asymmetry can be created through terrain, training, philosophical superiority, or timing. Although Sun Tzu, presents numerous examples and principles for the successful application of military force, the idea of creating and exploiting an asymmetry is central to his thought.

Similar to Sun Tzu, China's 36 Stratagems are a part of the bedrock of Chinese military thought. The 36 Stratagems are actually a collection of military maxims from various works to include Sun Tzu that stretch back over 2000 years. The stratagems have the authoritative nature of an aphorism in English in that they are perceived to be an authoritative statement of an obvious truth. The difference between an English-language aphorism and a Chinese stratagem is that in Chinese, each stratagem has a specific story that it derives from and illustrates its point. In contemporary society, an educated Chinese author will refer to the stratagem to convey the principle that he is trying to explain.

While the stratagems lack the authority of doctrine or doctrinal principles; they are useful to demonstrate the continuity of the idea of asymmetry in Chinese strategic culture. Two stratagems clearly illustrate this: the first is “Besiege Wei to Rescue Zhao” which refers to the concept of attacking an enemy that is too strong to face directly. In this case, one should attack something that he holds dear and is weakly defended. In the story that gave birth to this stratagem, the Kingdom of Qi, wishes to prevent the Kingdom of Zhao from being destroyed by a third kingdom, Wei, thus upsetting the balance of power. Instead of attacking Wei’s powerful military in Zhao, the armies of Qi attack the lightly defended capital of Wei, forcing the Wei army to return home.<sup>xliii</sup> The kingdom of Qi had created an asymmetry in method.

The second example from the 36 Stratagems is to “Steal the Firewood from Under the Pot.” The concept of this stratagem is that if the enemy is too powerful to face directly, the astute general should instead attack his source of power and undermine the foundations of that power. In an example of this stratagem, the general Cao Cao was faced with a larger, better supplied enemy force and was running low on supplies. Cao Cao had a cavalry force disguise themselves in the enemy’s uniform, infiltrate behind enemy lines, and destroy the enemy supply base. This completely reversed the situation as the enemy’s larger force was now a correspondingly heavier drain on his extremely limited supplies. After three days, Cao Cao destroyed the demoralized Yuan force in battle.<sup>xliii</sup> Cao Cao had created an asymmetry in method to attack and destroy the enemy supply base instead of facing its well-supplied force head on.

As has been shown, imperial China had a long tradition in its theory of an asymmetric approach to conflict, but the critical question is whether this tradition has

carried over into the modern People's Republic of China. To understand the modern PLA, it is necessary to understand the Maoist tradition from which it sprang. Prior to 1948, the PLA had been a collection of disparate communist Red Army guerilla units that coalesced into the People's Liberation Army. These various communist units had almost always been inferior in firepower and equipment to any adversary they had faced, be it the Nationalist Chinese or the Japanese. During the Civil War, the Red Army had adopted the maxim of "defeating the superior with the inferior." It was taken as an article of faith that superior political ideology was the magic weapon that allowed the survival of the Communist movement from its darkest days and kept it intact in the face of superior opponents. Once these various Red Army units were regularized into the PLA in 1948, it was only natural that its doctrine should show the influence of its revolutionary experience. This new doctrine was classically asymmetric in its form and was known as People's War.

People's War is a poor man's way to go to war. At this historical juncture, China's largest perceived threats were initially the United States and by the late 1960's, also the Soviet Union. China had neither the money nor the technology to face these threats head-on, so the PLA had to develop an asymmetry to allow the PRC a chance for victory. According to the basic doctrine, People's War called for a strong indoctrination of the local population and mobilization of large, ideologically inculcated militia formations. In the case of a large scale invasion (still perceived at this time to be the most likely form of conflict with another great power), the PLA itself would trade space for time while avoiding decisive engagement and withdraw into the interior of the country where a wartime industrial base had been established. Concurrently, the militia units



would stand-up and use irregular warfare to attack the invader's lines of communication.<sup>xliv</sup> This would create an asymmetry of will in which the Chinese, with infinite numbers and willingness to endure the hardship of occupation, would surely prevail. Although the ensuing war would carry a ghastly price, the Communist Party felt, based on history, that victory was assured.

Not only has there been a long tradition of the idea of creating asymmetries in Chinese theory, there is also strong precedent. Perhaps one of the most obvious examples of this is the Great Wall of China. The Mongol leader, Genghis Kahn invaded China and his son Kublai Kahn completed the conquest of the Southern Song Dynasty in A.D. 1279. The Mongols were a ruthless occupation force and within a hundred years, the Chinese had risen in revolt and forced out the Mongols. The victorious rebel leader established the Ming Dynasty in 1368. The initial emperors of the Ming Dynasty were hardy men and raised armies that could advance into the great steppes north of China and meet the horseback armies of the Mongols on equal terms. This martial spirit faded as the dynasty progressed and soon the Ming rulers were facing the same ominous threat of Mongol invasion that had destroyed the Song.

The response of the Ming emperors was to build the massive Great Wall of China, an extended fortification on the lines of many similar much older walls. The construction and maintenance of the Wall consumed an immense portion of the Ming imperial budget. The Wall provided a tactical point from which Ming armies could sally from or defend. In the end the effectiveness of the Wall was at best questionable. Its drain on the empire was not. For the purposes of this paper, the interesting aspect of the story of the Great Wall is that the Chinese emperors had chosen to develop an asymmetry in technology and

organization to deal with the Mongol threat. Instead of maintaining the hardy and light horseback armies similar to the Mongols, they instead developed a technological advantage in the form of immense fortifications and an organizational advantage in the form of more heavily armed infantry and horse formations to be used in tandem with the fortifications.<sup>xlv</sup>

In a more recent example during the Chinese Civil War, the Red Army's tactics against the Nationalist Forces were the proving ground for Mao's theory of People's War. Throughout a twenty year civil war, Communist forces consistently attempted to avoid large scale battles until the very end of the war. Instead they relied on the political indoctrination of their cadres to win local support and execute loosely coordinated attacks on the Nationalists. In the end, the Communists protracted the war until they found themselves in post-World War II China, a period of time in which the Nationalists were extremely weak in both public support and morale. At this juncture, the Communists struck with their full force and in the ensuing three years, the Nationalists collapsed. The Red Army had used an asymmetry of time and an asymmetry of tactics to defeat a force that was conventionally superior.

Finally, though the idea of People's War against a superpower invader was never proven, it very likely would have exhausted any aggressor. However, the weakness of People's War doctrine is that it was predicated on a receptive and supportive populace. Within two years of its founding in 1949, the PRC found itself embroiled on foreign soil in an undeclared war against the United States. On the Korean Peninsula, the Chinese People's Volunteers (CPV) discovered that the local Korean populace's experience with Communism to date had been far harsher than that of their neighbors in China. The

concept of People's War would not be successful without the large militias operating in the rear area of UN forces. The other successful PLA tactic during the formative years of the civil war was a war of maneuver, with deep envelopments isolating and destroying Nationalist battalions, brigades and divisions. This tactic was unsuccessful in Korea due to the limited room for maneuver and the exceptional firepower of American units. Even when the CPV was able to isolate an American battalion or brigade, it was unable to overcome American firepower to complete its destruction. Similarly, CPV forces were unable to check the firepower of the unit coming to the relief of its besieged compatriot. The PLA had to develop a new method to successfully cope with UN forces.

The answer it arrived at, while not elegant was successful. They developed an asymmetry in tactics. The CPV used human wave attacks to saturate the defenders' ability to hold off the assault, allowing Chinese infantry to successfully close with the enemy. This tactical solution was used with varying effect against UN forces. It proved fairly successful against the less experienced and firepower-poor South Korean formations, but less so against the better armed Americans. Regardless of the outcome, the Chinese again had developed an asymmetric solution that allowed them to compete with a superior foe.

### Today

We have seen that historically Chinese have a long tradition of employing asymmetrical warfare against their opponents, but we must be careful in our analysis. Drawing several vignettes out of an exceptionally long history does not make it the main underlying principle of organization within the contemporary PLA. What will be shown below is that in at least three major decisions over the past twenty years, the PLA has

systematically attempted to develop an asymmetric solution to deal with a current or anticipated adversary instead of developing more conventional forces.

### 1979 Vietnamese Incursion

Throughout the late 1970s, the relations between the PRC and Vietnam had deteriorated. The causes of the worsening relations involved the Vietnamese invasion of China's client, Cambodia, in late December of 1978. Furthermore, Vietnam had drifted farther under the influence of the Soviet Union, giving the China the sense of being encircled by the Soviets. In early 1979, China mustered an invasion force of some 300,000 men<sup>xlvi</sup> and crossed into Vietnam against some 70-100,000 Vietnamese border troops.<sup>xlvi</sup> In the course of heavy fighting against the border troops of a third world nation, China suffered some 62,000 casualties.<sup>xlvi</sup> More importantly, Chinese troop morale was exceedingly low with some 5000 Chinese POWs taken or almost seven percent of the men actually in Vietnam.<sup>xlvi</sup> Men in one of the main columns reportedly had to be forced to advance at gunpoint.<sup>1</sup> The expedition had all the markings of a military debacle.

The PLA's performance in Vietnam only served to provide a culmination of an intra-party debate on reforming the PLA. Other top-level leadership aside from Deng had been unhappy with the status of the PLA for some time. As early as January of 1975 at the Fourth National People's Congress, Zhou Enlai had called for "modernization" of the military as part of a larger overall reform of many sectors of the PRC's society. Deng Xiaoping picked up on this theme during his temporary rehabilitation the same year, at one point describing the situation to the CMC in no uncertain terms, "Today I'm going to talk mainly about the problems remaining in our army. I've thought the problems over

and would like to sum them up in five words: bloating, laxity, conceit, extravagance and inertia.”<sup>li</sup>

There were several factors behind the urge to reform the PLA, not the least of which was to use the embarrassing incursion as an opportunity to purge the military of Maoist tendencies. However, another key and perhaps the critical reason was a desire to improve the warfighting capabilities of the military. The Chinese had gone to war against a third world country and had come off much worse for the wear. A desire to ensure that this did not happen again was clear throughout the periodicals of the time. Over the next fifteen years, the PLA changed its doctrine, force structure, and weaponry to ensure that the next time it came up against a lesser power, it would be able to employ vastly superior capabilities. The overarching goal was to create an asymmetry in organization and technology between China and its neighbors.

The first change was to come in doctrine. Up to the early 1980s, the PRC had trained its forces under the doctrine of People’s War. In the early 1980s, this doctrine was revised to People’s War Under Modern Conditions (PWUMC). This new doctrine still anticipated a full scale war of national survival. But by the mid-1980s, the waning of Soviet power and emerging lessons of the Vietnam incursion drove China’s leaders to reconsider this assessment.

In February of 1986, Generals Zhang Zhen (of the Chinese National Defense University (NDU) and CMC) and Li Desheng (Political Commissar of the NDU) discussed this change in a *Jiefangjun Bao* editorial staff forum. Li Desheng stated, “We should shift our work in War Readiness from a posture of ‘fighting an early, major, and nuclear war’ onto the normal track of building a regularized and modernized

revolutionary army during a period of peace.”<sup>lii</sup> As a result of this recognition, PLA leadership began developing the doctrine of *jubu zhanzheng*, or Limited War, under which small and medium wars became the focus of military preparation.

In line with Deng’s overall approach to apply a more scientific method to the development of the PLA, military planners tried to define the type of war that the PLA would expect in order to train for it. The Chinese developed the “War Zone” (*Zhanqu*) concept.<sup>liii</sup> A War Zone is geographically contiguous with a PRC Military Region, while the span of control and level of command roughly equates to an American Combatant Command such as the Pacific Command (PACOM) headquartered in Hawaii.<sup>liv</sup> Next, Chinese military planners organized the scope and scale of warfare into three tiers: small, medium and large. A small war is one that would require mobilization of PLA manpower in one War Zone. A medium war would involve the mobilization of manpower in one or two War Zones, with national support through selective mobilization. A large war entails full national mobilization and would involve two or more War Zones.<sup>lv</sup> The PLA planners continued to refine this concept and by the end of 1988 it had become clear that the PLA leadership had embraced the concept of Limited War over People’s War.<sup>lvi</sup> Limited War had several principles that help us to understand the strategies for preparing for it. The first was the principle of “winning victory through elite troops,” which is described as having self-contained and modernized campaign forces conduct the operation. This principle emphasizes the role of well-trained and well-equipped troops in future wars. Local troops may be used, but they will generally be used in support roles.

The second principle is the concept of “gaining victory by striking first.” This idea serves the dual role of doctrinally legitimizing offensive first strikes and preventing

one's own forces from being the victim of an enemy's pre-emptive strike. Conversely, it also legitimizes the development of a first strike capability. Chinese theorists recognized that in a modern conventional war the first strike could be so debilitating as to throw the defender off balance and/or destroy his ability to respond.

The idea of "winning victory over inferiority with superiority" is a transposition of the old People's War concept of "winning victory over superiority with inferiority." The latter concept was held over from the Civil War in an environment where the expectation was fighting a major war with a numerically superior but tactically weak PLA against the US or USSR. The change in wording reflects the expectation under the Limited War theory that the PLA could mass its elite forces at the appropriate time and place to fight a short, intense war of medium or small scale.

The final principle is the concept of "fighting a quick battle to get a quick solution." This allows for strategic mobility of elite forces between war zones and minimizes the opportunity for an enemy to bring its own superior forces to bear against the PLA. This is especially important as China would be able to regain strategic freedom of its elite forces for deterrence or operations in other areas.

The next major doctrinal evolution took place in 1991 following the Gulf War. Many PLA leaders were surprised and dismayed at the overwhelming and decisive nature of the American victory over the Iraqis. The decisive nature of technology in modern conflict became manifest. Chinese military planners viewed their own forces, which lacked the high-tech equipment of the Americans, as having "Short Arms and Slow Legs."<sup>lvii</sup> In Chinese eyes, the Gulf War also validated the four above-mentioned

principles of limited war and led the Chinese national leaders to appreciate that they may have underestimated the strength of a possible enemy.

China's doctrine now was revised to "Limited War Under High-Tech Conditions" (高 技 条 件 下 的 有 限 战 争 *Gaoji tiaojian xia jubu zhanzheng*). In tandem with the recognition of technology's impact, the Chinese focus shifted from small and medium wars to medium level wars. With this new focus, China started to refine the concept of a War Zone Campaign (WZC). A WZC was the doctrine designed to fit the need. A lower level of warfare would require the actions of one or many Combined Arms Group Armies (CAGA).<sup>lviii</sup> In a small-scale war, a CAGA could operate independently, as one of many CAGAs within a CAGA Group, or as part of War Zone front. These organizations were all ground force organizations. Conversely a large-scale war required total national mobilization of all CAGAs and War Zones.<sup>lix</sup>

After reorganizing its doctrine, the PLA began to reorganize its forces. PLA planners began to experiment with new formations and how to employ them. One innovation in the force structure that began appearing in the mid-1980s was the Rapid Response Unit (RRU). The concept of RRU units seems initially to have come from western countries that also could not/would not simultaneously upgrade all their units but instead would field to small units and then experiment with the new capabilities.<sup>lx</sup> In the PLA, these units came from all four of the armed services and began playing a prominent role in training for the doctrine of Limited War during the four great wargames in 1988 that would lay the basis for implementing this new doctrine. These new formations were ideal for testing small quantities of advanced weaponry and helped to refine the doctrine. In the late 1980s and 1990s, as the PRC's economy has grown, the PLA budget has



similarly grown. The PLA has, as a result, had the opportunity to continue to equip and expand these units.

During the 1970s and early 1980s the regular forces were equipped with older, 1960s era equipment. The air force was primarily armed with Mig-17 and 19 type fighters and the army had 1950s vintage armor and artillery.<sup>lxi</sup> As PLA formations began to receive comparatively modern equipment, they began equipping individual units instead of issuing across the army. The MR commanders designated the RRU within their command and this unit was the first to receive new equipment.

During war games, these Rapid Response Units tended to be used for three key tasks: as “door openers” to breach enemy positions, as “steel hammers” to destroy critical enemy targets and as “boosters” to increase operational tempo.<sup>lxii</sup> In all three of these roles they used local superiority and their improved firepower and maneuverability to implement the principle of “winning victory over inferiority through superiority.” These RRU’s seemingly are the cornerstone upon which the PLA intends to continue to build its “elite troops.”

The organizational restructuring was and is occurring simultaneously with equipment modernization. This new equipment tends to facilitate the firepower, protection, and maneuverability of the gaining units. In some cases the enhancement is quite striking. All four armed services have brought many new systems into service. Moreover, as the PLA evolved through the 1990s, the role of the RRUs began to change from that of small experimental units to units designed to participate in actual high-intensity, short-duration combat. These small but evolving units have the dual benefit of providing both a deterrent effect to China’s potential adversaries and being ideal for the

rapid concentration in line with the new Chinese doctrine of Limited War under Modern Conditions.<sup>lxiii</sup>

The ground forces of the PLA have been modernizing the select RRU mechanized units with newer tanks and armored personnel carriers such as the T-85II and T-90 family of vehicles. The most recent DoD report to Congress states that the PLA will have fielded some 1800 Type 96 tanks by 2005.<sup>lxiv</sup> This is a huge step up in both lethality and firepower vis-à-vis most other tanks in the region from the T-54/69 series of tanks that were present in the late 1970s. Although this is still a small portion of the overall PLA force (2500 of China's 8500 tanks),<sup>lxv</sup> this is more than an adequate start for the execution of a limited war against a small or medium power such as Vietnam and/or Korea. The airborne units have grown in size from three brigades to three divisions. Finally the PLA Navy re-founded the PLAN Marine Corps in 1980, which has been acquiring hovercraft and other amphibious assault equipment.<sup>lxvi</sup>

The ground forces have expanded the RRUs from brigade/battalion sized units in the MRs to division and corps sized elements which now are estimated to make up around fifteen percent of the PLA's forces.<sup>lxvii</sup> The 15th Group Army (Airborne), China's strategic reserve, has now expanded to three divisions and is on twenty-four hour notice for deployment any where in China. The 38th, 54th, and 23rd Group Armies are other corps sized RRU units.<sup>lxviii</sup>

The PLA Air Force (PLAAF) is comparatively reliant on technology and has made larger strides in the past two decades. In its Vietnam incursion, the PLA's frontline fighters were a handful of Mig-21s, with most of its force consisting of Mig-17 and 19 generation of aircraft. It has since stopped production of this series of aircraft and since

the mid-1990's has purchased 48 Su-27s from the Russian Federation and negotiating a local production agreement to build some 200+ in China of which twenty to sixty may be Su-30s.<sup>lxi</sup> Simultaneously, the PLAAF is testing the domestically produced J-10 fighter-bomber, which reputedly has capabilities commensurate with a US F-16 fighter. Another model of the J-10 in production will likely have stealth characteristics.<sup>lxx</sup>

Although the PLAAF still has large holes in its air force modernization, it is remedying its lack of both AWACS and in-flight refueling capabilities. It has purchased a Russian Y-8AEW AWACS aircraft and is seeking to buy Russian A-50 MAINSTAY Aircraft.<sup>lxxi</sup> These two capabilities are crucial to successfully employing airpower against a moderately advanced enemy such as an ASEAN nation or Korea outside Chinese borders and outside the support radius of Chinese airbases.

The PLAN has also been attempting to develop an off-shore defensive capability since 1985.<sup>lxxii</sup> It has slowly been commissioning oilers and supply ships, with nine launched since the late 1970s. This sea replenishment capability is necessary to allow ships to fight and stay at sea according to the off-shore doctrine. Concurrently, the PLAN has been improving its surface fleet with guided missile destroyers and frigates. Most important has been the purchase of two *Sovremenny*-class guided missile cruisers equipped with Sunburn missiles that could significantly complicate the US employment of naval power around the Taiwan Strait.<sup>lxxiii</sup> This improvement in the surface fleet is complemented by the improvement of the submarine force with the purchase of 4 Russian Kilo-class attack submarines. Another area of acquisition worth mentioning is the development of hovercraft for amphibious landings.

Overall the PLA's doctrinal revisions and force modernization have given it a much more capable force. However, China is unlikely to voluntarily utilize these newly acquired capabilities against another great power in the region any time soon. Instead, the doctrine of Limited War foresees small, rapid conflict on the periphery of China. This indicates that the development of these forces are much more geared towards the smaller, less capable forces of a nation like Vietnam instead of the large and modern forces of Japan, the US or Russia. A smaller nation is unlikely to be able to field such modern forces. The Chinese have in fact created a technological gap between their forces and those of their likely opponents. They have created an asymmetry both in technology and organization. The asymmetry in technology is obvious in a comparison of the conventional forces, but the asymmetry in organization is also present in such formations as airborne forces or marine units which create capabilities that their opponents lack. The next case we will examine is one in which China has achieved technological parity but lacks the capability to use force.

#### The Taiwan Straits

In June of 1995, Taiwanese President Lee Teng-hui conducted a personal visit to the United States. He visited his alma mater, Cornell University, where he delivered a speech in which he repeatedly referred to Taiwan as the "Republic of China on Taiwan."<sup>xxiv</sup> Both the trip and speech were provocative in the eyes of the leaders in Beijing as the US had allowed a serving Taiwanese head of state to visit. This sin was compounded by the repeated reference that implicitly identified Taiwan as a sovereign state. This was not an incident that could go unanswered without undermining the mainland's "One China" Policy.

The PRC's response was to launch six DF-15 intermediate range missiles between 21 and 23 July. Within a month, the PLA began a ten-day series of live-fire missile exercises off of Taiwan's west coast. The next March, China conducted another series of missile tests reinforced by a large scale amphibious exercise. The question of why the PLA used this tactic to attempt to intimidate Taiwan is answered in the response of the US.<sup>lxxv</sup>

The PRC has insisted since 1949, that Taiwan is an internal matter that is not open to interference by any third party. Unfortunately for China, over the past fifty years, the US has played the role of Taiwan's patron. US interference with China's heavy-handed attempts to resolve the issue has ranged from deployments of the US Seventh Fleet to the threat of nuclear warfare. In 1995, the outcome was no different as the US President deployed two carrier battle groups to the vicinity northeast of the Straits--a powerful deterrent and signal of capability. At the end of the day, while shaking the Taiwanese stock market, the PRC had accomplished very little. The pro-independence candidate had been elected to office, the US had not been deterred and the PLA had expended a considerable amount of money for minimal return.

This overt deterrent action on the part of the US has been reinforced by a rather liberal American interpretation of the 1982 Joint Communiqué between the US and China. In the communiqué, the US affirms:

The United States Government states that it does not seek to carry out a long-term policy of arms sales to Taiwan, that its arms sales to Taiwan will not exceed, either in qualitative or in quantitative terms, the level of those supplied in recent years since the establishment of diplomatic relations between the United States and China, and that it intends gradually to reduce its sale of arms to Taiwan, leading, over a period of time, to a final resolution.<sup>lxxvi</sup>

However, the US 96th Congress almost immediately passed the Taiwan Relations Act that required that “the United States will make available to Taiwan such defense articles and defense services in such quantity as may be necessary to enable Taiwan to maintain a sufficient self-defense capability.”<sup>lxxvii</sup> Ever since US policy has walked the fine line of creating enough ambiguity to provide Taiwan with adequate weaponry without repudiating the communiqué, the basis of Sino-American relations.

Therein lays the kernel of the enduring problem for the PRC over the past fifty years. It is unlikely to be able to peaceably achieve a reunification with Taiwan; however, the nationalistic platform that the Communist Party has cultivated will not condone a retreat from a commitment to unification in the not too distant future. In 2000 the Defense White Paper of the PRC reserved the right to use force to resolve the situation in the Straits:

if a grave turn of events occurs leading to the separation of Taiwan from China in any name, or if Taiwan is invaded and occupied by foreign countries, or if the Taiwan authorities refuse, sine die, the peaceful settlement of cross- Straits reunification through negotiations, then the Chinese government will have no choice but to adopt all drastic measures possible, including the use of force, to safeguard China’s sovereignty and territorial integrity, and achieve the great cause of unification.<sup>lxxviii</sup>

Prior to these conditions being set forth, the White Paper had described the world situation in the following terms:

The Taiwan Straits situation is complicated and grim. Lee Teng-hui flagrantly dished out his “two states” theory in an attempt to split the country. Separatist forces in Taiwan are scheming to split the island province from China, in one form or another. The United States has never stopped selling advanced weapons to Taiwan. These actions have inflated the arrogance of the separatist forces in Taiwan, seriously undermined China’s sovereignty and security and imperiled the peace and stability of the Asia Pacific Region.<sup>lxxix</sup>

Clearly, China sees conflict over Taiwan as a possibility in the near term. As such, it must prepare itself for the conflict. If China reverts to force, it can expect to face a relatively modern Taiwanese defense force and a robust US response. In this scenario, should China attack, it must prevail quickly and delay or deter the anticipated US riposte.

In this scenario, the first requirement is to deter the US response to allow Chinese military strategy time to apply pressure against Taiwan. A US response would likely consist of a naval intervention. US Air Force assets deploying directly from US possessions such as Guam would enter Taiwanese airspace that the PRC would likely already control. They would arrive low on fuel with little to no capability to fight. Other traditional venues of US power would be equally ineffective in allowing the deployment of US combat forces. Cruise missiles could not establish a secure airspace for the US to flow in other forces, thus relegating missile carrying ships to a secondary role. Aegis-class destroyers and cruisers are themselves vulnerable to missile and submarine attack. The key condition that must be established to allow US reinforcement of Taiwan is control of the air. Air superiority or parity must be accomplished by US naval forces. The sole adequate platform for deployable naval airpower is the deck of a US Navy aircraft carrier. So the first and key platform that the Chinese must neutralize is the US aircraft carrier.

A good deal of thought seems to have been applied to this topic. In the early 1990's it appears that the Chinese had toyed with the idea of developing their own carrier capability, but seemed to decide that between cost and vulnerability considerations a carrier was not viable. Recent discussion has revolved around more asymmetric

responses. Three different modes of attack come to the fore: cruise missiles, submarines and “Assassin’s Mace” weapons.

China has developed a capability to deploy cruise missiles that would be lethal for a US carrier battle group. The first vector for acquisition of these weapons is purchase of foreign (Russian) military equipment. The Chinese purchased two *Sovremenny*-class destroyers equipped with the supersonic SS-N-22 missile from the Russian Federation in 1986<sup>lxxx</sup> with another two on order.<sup>lxxxi</sup> In addition, China’s CASC Third Academy had conducted extensive research on the defensive capabilities of American carriers. It has also been aided in the development of stealth capability in cruise missiles by the Russian Raduga Design Bureau.<sup>lxxxii</sup> Taken together, China is developing both the platform and the weapons to mount a cruise missile surge attack against a carrier battle group in the Straits.

The second vector is the acquisition of submarines. A 2002 Article in the *Beijing Military Digest*, identifies submarines as, “The maritime weapon posing the greatest threat to an aircraft carrier.”<sup>lxxxiii</sup> China’s submarine force has become much smaller since the 1980s, but the quality of its forces has improved markedly. In 2000, China had 5 Han Class nuclear attack submarines and two Kilo-class 877EKM submarines.<sup>lxxxiv</sup> These were supplemented in 2002 with an additional two Kilo-class 636 attack submarines. The Type 636 is quieter and more advanced than the normal export version, the 877 EKM. These nine attack submarines are now to be supplemented by an additional eight Kilos under a deal inked in 2002.<sup>lxxxv</sup>

The third and final vector in dealing with a US carrier battle group is the development of “Assassin’s Mace” weapons. Assassin’s Mace weapons fall into the



category of magic weapons discussed by Chinese authors. “Magic weapons,” are actually the fruits of the ongoing RMA and are a major emphasis of the RMA school within the PLA. They are new technological innovations that provide a previously unavailable capability to the PLA that is not anticipated by the enemy.<sup>lxxxvi</sup> Assassin’s Mace weapons have recently become a topic of greater conversation within PLA military circles. They seem to be a weapon, which by its first use, cripples or preempts the enemy’s ability to react or continue to resist. In this context, tactical nuclear weapons could be seen as Assassin’s Mace weapons in that if employed, they would both severely limit enemy ground forces ability to react and make them vulnerable to attack by technologically inferior PLA forces.<sup>lxxxvii</sup>

In the context of fighting a carrier battle group, the development of an Electro-magnetic Pulse (EMP) weapon as an “Assassin’s Mace” seems to be one way in which the formidable defensive suite of the group could be overcome.<sup>lxxxviii</sup> Disabling the group’s defensive suite would make it vulnerable to attack by China’s technologically inferior but much more numerous air force. Several sources in 2000 advocated development of EMP weapons for the specific purpose of disabling the electronics suite of AEGIS destroyers and the carriers themselves. The weapons would be launched from long range and following their detonation would be followed by waves of Chinese fighters and/or cruise missiles to finish the doomed ships.<sup>lxxxix</sup>

Assuming Chinese success in deterring, delaying, or destroying the American battle group, the next step would be dealing with Taiwan. This would not be as easy as one might think. Although China holds overwhelming conventional ground superiority, it does not have the capability to lift its ground forces across the Strait in adequate numbers

to ensure the successful establishment and maintenance of a beachhead. This is due to a shortage of amphibious craft or the certainty of being able to establish air superiority quickly enough to allow the invasion before US intervention. As a result, China's strategy seems to be developing a missile deterrent that could create terror in Taiwan and effectively close Taiwan's harbors to shipping thus strangling Taiwan.

This strategy seems to be born out by two different trends. The first is the deployment of large numbers of tactical missiles in Fujian across the Strait from Taiwan and the second is the increasing accuracy and quality of the missiles in the region. Although open source data is hard to find, many sources point to the general number of 600-650 missiles on the Chinese side of the Strait by 2005 with 75 more being added each year.<sup>xc</sup> In case of conflict, this could play havoc with Taiwanese shipping lanes. Even assuming the PRC maintained as many as half of these missiles in reserve, the remaining half would generate immense psychological and economic pressure on Taiwan to settle any conflict on terms amenable to the PRC. This is especially the case if the PRC maintains "escalation dominance" or the ability to raise the level of conflict higher than Taiwan could maintain (e.g., nuclear or chemical weapons). Some newspaper reports out of Taiwan claim that the PRC is placing thermobaric weapons on top of its tactical missiles creating a far more lethal weapon that also has a much greater "terror value."<sup>xc</sup>

The second development in PRC missile forces is their increasing accuracy. According to Mark Stokes, the Chinese are further refining the accuracy of their missiles through the integration of Global Positioning Systems (GPS), differential GPS, and digital scene matching in various missiles. This can transform the capability of the missiles from a terror weapon to a large scale weapon that could critically damage docks

and other key economic and military infrastructure in Taiwan. This would make it much more difficult for US forces to reinforce Taiwan. In the end it is unlikely, that the PRC desires to destroy Taiwan. Instead, the PRC's leaders would like to quickly cow the Republic of China into rapid acquiescence and present the US with a *fait accompli*.

So we have seen that the PRC sees the probability of conflict in the Taiwan Straits as possible if not likely in the near term. It does not yet have the capability to succeed in an attack or prevent US reinforcement, but is working on developing it. The PLA's answer to this is to develop asymmetric responses. China has developed an asymmetry in organization by choosing missile forces and submarines to deter US carriers. It is also pursuing an asymmetry in technology by developing its Assassin's Mace weapons such as thermobaric warheads and EMP bombs. However, the Taiwan Straits scenario largely involves a limited war, the last case we will examine is that of having to deal with a technologically superior great power.

### Coping with US Power

The final example we will examine is the development of capability to compete in a multipolar world. Chinese writers see the world in transition as the environment changes from being unipolar with one superpower to multipolar with several centers of power. This transition, they assume, may be less than peaceful as the old superpower (or hegemon) attempts to retain its diminishing relative power while simultaneously, emerging power centers attempt to gain and consolidate their newly found power. In China's 2002 Defense White Paper, the government of the PRC asserts:

The world is far from being tranquil. The old international political and economic order, which is unfair and irrational, has yet to be changed fundamentally. Economic development of the world is materially unbalanced, and the North- South gap is further widening. The developing countries have gained less from the economic globalization process, and some of them are in danger of being marginalized. Democracy in international relations remains elusive, and there are new manifestations of hegemonism and power politics.<sup>xcii</sup>

Chinese authors go on to assert that hegemonism in the form of US intervention and involvement in local wars actually inflames and protracts local wars.<sup>xciii</sup> These local wars provide an opportunity for other great powers to increase their power as the status quo is unsettled and can be renegotiated in the course of the conflict. Therefore, it is in China's interest to be sure it is able to effectively intervene in any conflict which may impair China's ability to continue to develop its CNP. Of most interest to China are critical areas on its periphery such as the oil-rich Central Asian states, the South China Sea, and Northeast Asia. Possible intervention by other great powers in these areas forces China to develop capability to prevail, but China is still decades away from fielding a first-class conventional force.

There is a school of Chinese analysis that argues that there is no need to develop a modern mechanized army that can hold the field with US forces who are the current measure of excellence. There is a significant and ongoing RMA that revolves around the emergence of information warfare. In 1995, the PLA held a conference in which the view emerged that, "Waves of a military revolution with information technology as both its foundation and nucleus are surging toward us. This is a revolution which will produce an impact on the balance of the world's military strength in the next century and also an epoch-making change which is gradually turning mechanized war

into information war.”<sup>xciv</sup> This is a revolution--the transition from mechanized warfare to information warfare. It is one that the PLA intends to exploit fully.

The definition of RMA is a point of some contention in Western and especially US doctrine. There are those who feel that there is an ongoing military-technical revolution, in which there are remarkable new or vastly improved technologies that allow a far more lethal execution of current military paradigms. Conversely, there are those who feel that there is nothing less than a wholesale transformation of the nature of warfare. There is not a great deal to be gained by comparing the various, competing definitions of an RMA. For the purposes of this paper, the following is offered as a working definition of an RMA: An RMA is a historical moment where a combination of changes in technology, doctrine, and organization give rise to markedly new forms of warfare.

When an RMA occurs, one can be either part of the development of the new conception of warfare or be the concept’s test bed. Chinese analysts and generals are anxious to be in the former category. In terms of the other great powers, the US, Europe, Russia and Japan are all carrying out the RMA at various levels and speeds. The Chinese also render a great deal of respect for the capabilities of the Indian scientific community if not necessarily India’s economic component of power. Russia is perceived as being at the cutting edge of the RMA in terms of theory.<sup>xcv</sup> The United States is perceived as being far along in terms of the RMA theory and farthest along in actual deployment. However, the Chinese actually express some doubt expressed about the ability of the US to fully carry out the RMA transformation due to its large, existing capital and the cost of fielding its replacement.<sup>xcvi</sup>

For a validation of their perceptions of an ongoing RMA, Chinese analysts looked at the US performance in the Gulf War and the war in the former Republic of Yugoslavia. Many Chinese analysts felt that these two conflicts were the beginning of a new style of war, Information Warfare. As many Chinese writers discuss the RMA and its characteristics information warfare is one of the key components they discuss.

The RMA supporters form a school of thought within the PLA that China should take advantage of the ongoing RMA which will provide the PLA with the opportunity to leapfrog the development of these forces into the fielding of a post-RMA military in the same time frame as the United States.<sup>xcvii</sup> The key facet of an RMA in the view of many Chinese writers seems to revolve around the importance of Information Warfare. In fact some writers go so far as to assert that Information Warfare is the RMA.<sup>xcviii</sup>

The current Chinese perception of Information Warfare revolves around four key subsets: Precision Strike Warfare, Electronic Warfare, Psychological Warfare and Deception, and Computer Network Attack.<sup>xcix</sup> Precision Strike Warfare is a conception of using precision-guided munitions to attack enemy command and control nodes in order to create paralysis on the battlefield. The underlying assumption that these command and control nodes can be accurately located requires space parity, Special Operations Forces, and Electronic Warfare capabilities.

The second component in IW is Electronic Warfare which has both defensive and offensive subcomponents. The defensive component requires hardening of electrical systems, electronic counter-counter measures such as radiation guided missiles, and

emissions control. The offensive component includes Electronic Counter Measures, jamming, and physical attack.

The third component is Psychological Warfare and Deception which calls for a robust public affairs campaign, attempts to undermine the political will of the enemy populace and attempts to impact the enemy soldiers' will to fight. This component is also important in isolating the conflict and preventing third-party entry into any engagement. This is critical in keeping the war both limited and local in nature.

The final component is Computer Network Warfare. Computer Network Warfare is an attractive component at many levels. It inherently holds the possibility of directly attacking an enemy's homeland via network attacks on stock markets, power facilities, commerce and transportation--a capability that the PLA's conventional forces lack for the foreseeable future. Additionally, it has the potential to act as an Assassin's Mace, crippling the enemy's ability to react at the outset of any battle, opening the door to other specialized units acting as "steel hammers" to destroy a critical node or capability.

The interesting facet of the IW school within the PLA is that it once again forgoes direct force-on-force attacks in favor creating an asymmetry in technology in the shape of Assassin's Mace-type weapons and an asymmetry in organization in how it fields and equips its forces to deal with the threat of a great power opponent.

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<sup>xv</sup>Thomas J. Christensen, "Chinese Realpolitik" *Foreign Affairs* 75, (Sep/Oct 1996), 37.

<sup>xvi</sup>Michael Pillsbury, *China Debates the Future Security Environment*, (Washington, D.C: National Defense University Press, 2000) 3.

<sup>xvii</sup>Ibid., 4.

<sup>xviii</sup>Deng Yong, “The Chinese Conception of National Interests in International Relations.” *The China Quarterly* 154 (Jun 1998): 314.

<sup>xix</sup>Ministry of Foreign Affairs. *White Paper on China's National Defense*. <http://fas.org/nuke/guide/china/doctrine/natdef2002.html>. 9 Dec 02 [5 Mar 03]

<sup>xx</sup>Pillsbury. *China Debates*. 37.

<sup>xxi</sup>Ibid., 259.

<sup>xxii</sup>Qiao Liang. and Wang Xiangsui, *Unrestricted Warfare*. trans. FBIS (Beijing: PLA Literature and Arts Publishing House, 1999), 127.

<sup>xxiii</sup>Mark A Stokes, *China's Strategic Modernization: Implications for the United States* (Carlisle, PA: Strategic Studies Institute, 1999), 12.

<sup>xxiv</sup>Chinese literature often refers to “magic weapons” or “trump cards” in describing the capabilities they would like to be able to develop in future limited conflicts under “high-tech” conditions. These will be examined later in the case studies.

<sup>xxv</sup>MoFA. 2002 *White Paper*.

<sup>xxvi</sup>US Army, FM 3-0, *Operations*, 4-31.

<sup>xxvii</sup>Ibid.

<sup>xxviii</sup>Colin S. Gray, “Thinking Asymmetrically in Times of Terror.” *Parameters*. (Spring 2002): 8.

<sup>xxix</sup>Ockham’s Razor was a philosophical tool formulated by William of Ockham in the 14<sup>th</sup> Century. It is encapsulated in the idea that in reducing an idea to its simplest plausible formulation one likely also attains the most reliable definition.

<sup>xxx</sup>Steven Metz “Strategic Asymmetry.” *Military Review* LXXXI (Apr 2001): 23

<sup>xxxi</sup>Cui Zhangqi ed, *Xin Pian Ying-Han Han-Ying Junshi Cidian*, (Beijing. National Defense Publishing Press), 1999.

<sup>xxxii</sup>He Xin. “America’s New ‘National Security Strategy’ and the Current International Situation” *Beijing Neibu Canyue*. 13 Sep 02. No. 35, 2-12 (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP20021212000213. 12 Dec 02.



<sup>xxxiii</sup>Tang Shiping. “China’s Periheral Security Environment in 2010-2015 – Decisive Factors, Trends and Prospects.” *Beijing Zhanlue yu Guanli in Chinese*. 1 Oct 02. No. 5. 34-45 (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP20021017000169. 17 Oct 02.

<sup>xxxiv</sup>Kang Hengzhen, “Article on Asymmetrical War Strategy”

<sup>xxxv</sup>Ibid.

<sup>xxxvi</sup>Zhu Xiaoning, “A Monopoly on the ‘Asymmetrical Battlefield’” *Jiefangjun Bao*. 23 Nov 1999. 6. (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP19991226000253. 26 Dec 99.

<sup>xxxvii</sup>Hu Pingjun, “Analysis of US Army's 'Asymmetrical Operations'.” *Jiefangjun Bao*, 21 Sep 99. (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP19991105000392. 5 Nov 99.

<sup>xxxviii</sup>Qiao and Wang, *Unrestricted Warfare*, 123.

<sup>xxxix</sup>See Metz.

<sup>xl</sup>Sun Tzu, *The Art of Warfare*, trans. Roger Ames (New York: Ballantine, 1993) 105.

<sup>xli</sup>Ibid., 127.

<sup>xlii</sup>Stefan H. Verstappen, *The Thirty-Six Strategies of Ancient China*, (San Francisco: China Books & Periodicals Inc, 1999), 10.

<sup>xliii</sup>Ibid., 94.

<sup>xliv</sup>Michael Swaine. “Chinese Military Modernization and Asian Security” <http://www.ciaonet.org/wps/swm01/> Apr 2002 [23 Oct 03].

<sup>xlv</sup>For an interesting examination in the history of the Great Wall, Arthur Waldron’s, *The Great Wall of China: From History to Myth* is an excellent book.

<sup>xlvi</sup>Chen and Jencks differ on the figure actually staged forward in the Guangzhou MR, but both agree on the figure of roughly 80,000 men committed into action in Vietnam.

<sup>xlvii</sup>Jencks, Harlan. “China’s ‘Punitive’ War on Vietnam: A Military Perspective” in *Asian Survey* (Aug 1979): 808.

<sup>xlvi</sup>*Ibid.*, 814.

<sup>xli</sup>King C. Chen, *China's War With Vietnam, 1979: Issues, Decisions, and Implications*, (Stanford, CA: Hoover Institution Press Stanford University, 1987), 115.

<sup>li</sup>*Ibid.*, 115.

<sup>li</sup>Deng Xiaoping, *The Selected Works of Deng Xiaoping*, (Beijing: Foreign Language Press, 1984), 11.

<sup>lii</sup>“A Shift in China's Strategy for Building Armed Forces Shows New Evaluation of World Situation” in *Ta Kong Pao*. p1 in FBIS-CHI 18 Feb 1986. W12.

<sup>liii</sup>In terms of responsibilities and level of command, a Chinese War Zone roughly equates to a U.S. combatant command.

<sup>liv</sup>Paul H.B. Godwin, *The Development of the Chinese Armed Forces*, (Maxwell Air Force Base, AL: Air University Press, 1988), 468.

<sup>lv</sup>Nan Li. “The PLA's Evolving Warfighting Doctrine, Strategy and Tactics, 1985-95: A Chinese Perspective,” in *The China Quarterly* 146. (June 1996): 448.

<sup>lvi</sup>Paul Godwin, “From Continent to Periphery: PLA Doctrine, Strategy, and Capabilities Toward 2000,” *The China Quarterly* 146 (June 1996): 472.

<sup>lvii</sup>*Ibid.*, 473.

<sup>lviii</sup>A CAGA is roughly equivalent in size and scope of command to a small U.S. Corps of two divisions or 50-60,000.

<sup>lix</sup>Nan Li, “The PLA's Evolving Campaign Doctrine and Strategies” in Mulvenon, James C. and Michael H. Yang ed. *The People's Liberation Army in the Information Age*, (Santa Monica, CA: The Rand Corporation, 1999), 149.

<sup>lx</sup>Tie Dongfang, “What We Can Learn from Other Countries' Practice of Strengthening Key Troops” *Jiefangjun Bao*. 19 March 1981. 1 (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI 6 Apr 1988. 39-40.

<sup>lxi</sup>Paul Godwin, “From Continent to Periphery.” 479.

<sup>lxii</sup>*Ibid.*, 469.

<sup>lxiii</sup>Yang, Andrew N.D. and Milton Wen-Cheng Liao, "PLA Rapid Reaction Forces: Concept, Training, and Preliminary Assessment" in James C. Mulvenon and Michael H. Yang ed. *The People's Liberation Army in the Information Age*. Santa Monica, CA: The Rand Corporation. 1999. 49.

<sup>lxiv</sup>Department of Defense. "Annual Report on the Military Power of the People's Republic of China." <http://www.defenselink.mil/news/Jul2002/d20020712china.pdf>. July 2002. 4. [11 Nov 02].

<sup>lxv</sup>David Shambaugh, "The People's Liberation Army and the People's Republic at 50: Reform at Last" *The China Quarterly* 159 (September 1999): 670.

<sup>lxvi</sup>*Ibid.*, 482.

<sup>lxvii</sup>Dennis Blasko, "A New PLA Force Structure," in James C. Mulvenon and Richard H. Yang ed. *The People's Liberation Army in the Information Age*. (Santa Monica, CA: RAND Corporation, 1999), 261.

<sup>lxviii</sup>Paul Godwin, "From Continent to Periphery," 482.

<sup>lxix</sup>Shambaugh, "The People's Liberation Army and the People's Republic at 50," 669.

<sup>lxx</sup>DoD, "Annual Report," 35.

<sup>lxxi</sup>*Ibid.*, 3.

<sup>lxxii</sup>Paul Godwin, "From Continent to Periphery," 478.

<sup>lxxiii</sup>Barbara Slavin and Steven Komarow, "China's Military Upgrade May Raise Stakes in Taiwan," *USA Today* 19 November 1999, 16.

<sup>lxxiv</sup>Globalsecurity.org. "Taiwan Strait 21 July 1995 to 23 March 1996." [http://www.globalsecurity.org/military/ops/taiwan\\_strait.htm](http://www.globalsecurity.org/military/ops/taiwan_strait.htm) [19 January 2002].

<sup>lxxv</sup>Andrew Scobell. "Show of Force: The PLA and the 1995-1996 Taiwan Straits Crisis." <http://www.ciaonet.org/wps/sca03/sca03.pdf> [January 1999]. 5.

<sup>lxxvi</sup>U.S. Embassy, Beijing PRC "Joint Communiqué of the United States of America and the People's Republic of China." <http://www.usembassy-china.org.cn/irc/policy/jtcomm2.html> [19 Feb 2002] 17 Aug 1982.

<sup>lxxvii</sup>U.S. Congress. "Taiwan Relations Act." <http://usinfo.state.gov/regional/ea/uschina/taiwact.htm>. 10 Apr 1979 [March 03]

<sup>lxxviii</sup>Ministry of Foreign Affairs. *China's National Defense in 2000*. <http://fas.org/nuke/guide/china/doctrine/cnd0010/china-001016wp2.htm>. 16 October 2000 [5 Mar 2003].

<sup>lxxix</sup>*Ibid.*, <http://fas.org/nuke/guide/china/doctrine/cnd0010/china-001016wp1.htm> 16 October 2000 [5 Mar 2003]

<sup>lxxx</sup>Mark A. Stokes, *China's Strategic Modernization: Implications for the United States*, (Carlisle, PA: Strategic Studies Institute, 1999), 86.

<sup>lxxxi</sup>David Lague and Susan V. Lawrence. "In Guns We Trust." *Far East Economic Review*. <http://www.cdi.org/russia/234-7.cfm> 12 Dec 2002 [25 Jan 03]

<sup>lxxxii</sup>Stokes. *China's Modernization*. 86.

<sup>lxxxiii</sup>Wang Jiasuo, "Aircraft Carriers: Suggest You Keep Out of the Taiwan Strait!" *Beijing Junshi Wenzhai* 01 Apr 02. 58-59 (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP20020326. 26 Mar 02.

<sup>lxxxiv</sup>Federation of American Scientists. People's Liberation Army Navy. <http://www.fas.org/man/dod-101/sys/ship/row/plan/index.html> [5 Mar 2003]

<sup>lxxxv</sup>Lague and Lawrence. "In Guns We Trust."

<sup>lxxxvi</sup>Pillsbury. *China Debates the Future*. 297.

<sup>lxxxvii</sup>Michael Pillsbury, "China's Military Strategy Towards the U.S.: A View From Open Sources." <http://www.uscc.gov/strat.pdf>. 2 November 2001. 13-14 [12 Feb 03].

<sup>lxxxviii</sup>*Ibid.*, 15.

<sup>lxxxix</sup>Ye, Jian, "Armchair Strategy: Using a Bomb to Deal With Aircraft Carrier" *Jiefang Ribao*. 12 Feb 2000 (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP20000212000019 12 Feb 2002.

<sup>xc</sup>Jim Wolff. "China Aims 75 More Missiles a Year at Taiwan" in *Reuters* 21 Feb 2003. <http://taiwansecurity.org/Reu/2003/Reuters-022103.htm>. [23 Jan 03].

<sup>xci</sup>Chen Tung-lung. "China's Guided-Missiles Are Replaced by 'Thermobaric Warheads' That Has Changed the Traditional Weapon" *Taipei ET Today*. 14 Nov 02.

(Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP20021120000167. 20 Nov 2002 [25 Nov 02].

<sup>xcii</sup>Ministry of Foreign Affairs. *White Paper on China's National Defense*. <http://fas.org/nuke/guide/china/doctrine/natdef2002.html>. 9 Dec2002 [5 Mar 03].

<sup>xciii</sup>Pillsbury. *China Debates*. 43.

<sup>xciv</sup>Zhang Feng and Li Bingyan. "Historical Mission of Soldiers Straddling the 21<sup>st</sup> Century" *Jiefangjun Bao* 2 Jan 1996 (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID FTS 19960102000004. 2 Jan 96.

<sup>xcv</sup>Pillsbury. *China Debates*. 184.

<sup>xcvi</sup>*Ibid.*, 66.

<sup>xcvii</sup>Toshi Yoshihara. "Chinese Information Warfare: A Phantom Menace or Emerging Threat?." <http://www.iwar.org.uk/iwar/resources/china/iw/chininfo.pdf>. Nov 2001 [7 March 2003]. 7.

<sup>xcviii</sup>*Ibid.*, 10.

<sup>xcix</sup>*Ibid.*, 16-17.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

In the end, we once again analyze the question of whether the Chinese People's Liberation Army is developing asymmetric warfare capabilities, and if so, what are the characteristics of these asymmetric capabilities. After analysis, we must answer yes, there is both a traditional and current pattern of asymmetrical warfare in the strategic thought of the PRC and its predecessor states. Although "Asymmetric Warfare" as a proper noun is relatively new to the Chinese security debate, there is a long-term pattern of this sort of warfare in Chinese history.

The Chinese term for asymmetry varies and depending on the term, it can have a theoretical and strategic connotation or a tactical one. Common to both is the key idea of the applicability of the Marxist dialectic in conceptualizing the battlefield. If the enemy's strength is seen as the thesis, the creative and logical thinker will find the antithesis to create a means of addressing an adversary's strength.

The underlying pattern of asymmetric warfare stretches back several thousand years to the dawn of Chinese strategic thought. It is born out in both the theoretical writings such as Sun Tzu and the 36 Stratagems as well as in historical precedent. There is no more elegant evidence of Chinese strategies of asymmetry than the construction of the Great Wall of China during the Ming Dynasty to fend off the resurgent Mongol tribesmen on China's northeast periphery. These are clear examples of Metz's asymmetry of technology (fortification to combat mobility) and organization (infantry based reaction forces to combat horsemen).

This trend has continued into the present regime. Examples of Metz's asymmetry of will are provided both by the doctrine of People's War and the human wave attacks of the Korean War. Metz's asymmetry of organization are evident in the conduct of the Chinese Civil War by the Red Army and the current reorganization of the PLA within the framework of Limited War under Modern High-Tech conditions. Finally, new to the PLA but not China's strategic culture is the attempts to develop asymmetry of technology. This is demonstrated in the PLA's embrace of high-tech formations, information war and "magic weapons." Although the actual term "asymmetry" is somewhat new to the PLA, China has historically sought to develop asymmetric solutions to strategic challenges.

To look at the underlying pattern of developing asymmetric responses, we can see that traditionally, these tend to be asymmetries of will and method. However, the perception of an ongoing Revolution in Military Affairs is now encouraging the Chinese defense establishment to think in terms of developing asymmetries in technology that will allow them to create Assassin's Mace weapons that can be used in the context of a limited war to allow the Chinese to "fight a quick battle to achieve a quick solution." These weapons would be used as "door openers," "steel hammers," or "boosters" that would seize the initiative allowing qualitatively inferior forces to prevail over a technologically superior one or overwhelm a technologically inferior force. As we have seen, the principle of "gaining victory by striking first" fits well with the facet of asymmetry that relies on expectation. The RMA provides the opportunity to introduce a technologically unprecedented weapon or unit that will fulfill Colin Gray's idea that, "Asymmetric threats work by defeating our strategic imagination."<sup>c</sup> Strategic and

operational surprise are consistently part of Chinese strategic culture in applying its asymmetry.

There are several other areas of study that would be of value in further examining the field of Chinese asymmetric warfare. The first is a decidedly more technical but valuable undertaking. There should be a more in-depth and complete analysis of the etymology of the Chinese terms. As we have seen, there is significance in the choice of characters used to translate the term “asymmetry” into English. A study could examine some of the more critical terms used in Chinese on contemporary defense topics, look at their history in Chinese and attempt to evaluate the implications of the character choice. The Chinese language is rich in allusion and the inability to fully translate this into English leads to a shortfall in understanding. This study would be valuable to scholars who are not fully conversant in Chinese, or military scholars more focused on the military implications of the work than on the culturally specific aspect.

A second valuable contribution would be a more thorough examination of the Chinese perceptions of the opportunities provided by the RMA. In the US, the idea of an RMA is currently somewhat belabored, but there is still lack of a common consensus. There is a consensus in China that there is, in fact an ongoing RMA. Michael Pillsbury has already done some excellent work in this field that could be further refined and referred to in US circles debating the validity and impact of an RMA. This would also allow a better understanding of the strategic direction and philosophy underlying future Chinese force development.

A third and final recommendation for further analysis would be an analysis of the impact of the PLA’s organization on its development of joint concepts and



interoperability. China and the US have had a diametrically opposed experience in developing joint operations in their force structure. The US started with the tradition of two very strong and independent services in the shape of the Army and Navy that have learned how to work together effectively since the beginning of the Second World War. Originally, the PLA was solely a land force that later developed air and naval components as adjuncts to support its operations. Further specialization of the PLA Navy and Air Force has further differentiated them from the Army, however the high command is still the land component PLA. The Chinese already have the one, single unified service that many service advocates in the US fear is developing in the form of the US Joint Staff. This very different experience has led to similar solutions for different reasons. The implication of an underlying truism is worth further study.

In the end, the study of the PLA is important to US officers and academics for two key reasons. First, China is a rising power with geopolitical and economic concerns similar in some respects to those of the United States. How they develop the military component of national power is therefore of importance. Secondly, there is much to be learned in understanding how a different culture has conceptualized warfare and created the tool with which to wage it. In looking at others, one can better understand the undetected biases that have crept into his own thinking and attempt to arrive at the most logical answers to suit our own needs. Mao Zedong once said, “You fight your war and I’ll fight mine,” to ensure we will win the “hundred battles,” the US should ensure that it knows how the PLA will fight their war.

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<sup>c</sup>Colin S. Gray, “Thinking Asymmetrically in Times of Terror.” *Parameters*. (Spring 2002): 8.

## BIBLIOGRAPHY

### Books

- Chen, King C. *China's War With Vietnam, 1979: Issues, Decisions, and Implications*. Stanford, CA: Hoover Institution Press Stanford University, 1987.
- Cui Zhangqi, ed. *Xin Pian Ying-Han Han-Ying Junshi Cidian* (New Edition English-Chinese Chinese-English Military Dictionary). Beijing: National Defense Publishing Press, 1999.
- Deng Xiaoping. *The Selected Works of Deng Xiaoping*. Beijing: Foreign Language Press, 1984.
- Godwin, Paul H. B. *The Development of the Chinese Armed Forces*. Maxwell Air Force Base, AL: Air University Press, 1988.
- Huntington, Samuel P. *The Clash of Civilizations and the Remaking of the New World Order*. New York: Touchstone, 1997.
- Lilley, James R., and David Shambaugh, ed. *China's Military Faces the Future*. Washington, D.C.: American Enterprise Institute for Public Policy Research, 1999.
- Mearsheimer, J. J. *The Tragedy of Great Power Politics*. New York and London: Norton & Company, 2001.
- Mulvenon, James C. and Richard H. Yang ed. *The People's Liberation Army in the Information Age*. Santa Monica, CA: RAND Corporation, 1999.
- O'Hanlon, M. *Technological Change and the Future of Warfare: Understanding the Revolution In Military Affairs*. Washington, D.C.: The Brookings Institution Press, 2000.
- Pillsbury, Michael. *China Debates the Future Security Environment*. Washington, D.C: National Defense University Press, 2000.
- Qiao Liang. and Wang Xiangsui. *Unrestricted Warfare*. Translated by FBIS. Beijing: PLA Literature and Arts Publishing House, 1999.
- Shambaugh, David, and James R. Lilley. *China's Military Faces the Future*. American Enterprise Institute for Public Policy: Washington, D.C., 1999.
- Stokes, Mark A. *China's Strategic Modernization: Implications for the United States*. Carlisle, PA: Strategic Studies Institute, 1999.

Studwell, Joe. *The China Dream: The Quest for the Last Great Untapped Market on Earth*. New York: Atlantic Monthly Press, 2002.

Sun, Tzu. *The Art of Warfare*. Translated by Roger Ames. New York: Ballantine Books, 1993.

Tellis, Ashley, and Michael Swaine. *Interpreting China's Grand Strategy*. Santa Monica, CA: Rand Corporation, 2000.

Toffler, Alvin and Heidi. *War and Anti-War: Survival at the Dawn of the 21st Century*. New York and Boston: Little, Brown, and Company, 1993.

US Army. FM 3-0, *Operations*. Washington, D.C: Department of the Army, 2001.

Verstappen, Stefan H. *The Thirty-Six Strategies of Ancient China*. San Francisco: China Books & Periodicals Inc., 1999.

Waldron, Arthur. *The Great Wall of China: From History to Myth*. Cambridge, UK: Cambridge University Press, 1990.

#### Articles and Periodicals

Chou, Oliver. "PLA Gains Know-How In Hi-Tech Warfare." *South China Morning Post*, 18 November 1999. 2.

Christensen, Thomas J. "Chinese Realpolitik." *Foreign Affairs* 75, no.6 (1996): 37-52.

Cohen, Eliot. "A Revolution in Warfare." *Foreign Affairs* 75, no. 2 (1996): 37-54.

Deng, Yong. "The Chinese Conception of National Interests in International Relations." *The China Quarterly* 154 (June 1998): 308-329.

Godwin, Paul. "From Continent to Periphery: PLA Doctrine, Strategy, and Capabilities Toward 2000." *The China Quarterly* 146 (June 1996): 464-487.

Glaser, Bonnie S., and Phillip C. Saunders. "Chinese Civilian Policy Research Institutes: Evolving Roles and Increasing Influence." *The China Quarterly* 171 (September 2002): 597-616.

Gray, Colin S. "Thinking Asymmetrically in Times of Terror." *Parameters* 32, no. 1 (spring 2002): 5-15.

Huang Caihong and Xiao Pu. "Achievements in PLA Reform." *Xinhua She Service*, 9 December 1998. 5.

- Hui Chen. "Military Officers Now Better Educated." *Beijing Xinhua She*, 13 October 1997. 14.
- Jencks, Harlan. "China's 'Punitive' War on Vietnam: A Military Perspective," *Asian Survey* (August 1979): 806-815.
- Li Nan. "The PLA's Evolving Warfighting Doctrine, Strategy and Tactics, 1985-95: A Chinese Perspective," *The China Quarterly* 146 (June 1996): 443-463.
- Li Nan. "Organizational changes of the PLA, 1985-1997," *The China Quarterly* 158 (June 1999): 314-349.
- Michael McDevitt. "Where's China's Navy Headed?" *Proceedings* 127: 58-61.
- Metz, S. "Strategic Asymmetry," *Military Review* LXXXI (Apr 2001): 23- 31.
- Mulvenon, James and Bates Gill. "Chinese Military-Related Think Tanks and Research Institutions," *The China Quarterly* 171 (September 2002): 617-624.
- O'Hanlon, Michael and Bates Gill. "China's Hollow Military," *The National Interest* 56 (summer 1999): 55-62.
- Shambaugh, David. "The People's Liberation Army and the People's Republic at 50: Reform at Last," *The China Quarterly* 159 (Sept 1999): 660-672.
- Shambaugh, David. "China's Military Views the World: Ambivalent security." *International Security* 24-3 (Winter 1999): 52-79.
- Shambaugh, David. "China's International Relations Think Tanks: Evolving Structure and Process," *The China Quarterly* 171 (September 2002): 575-596.
- Slavin, Barbara and Steven Komarov, "China's Military Upgrade May Raise Stakes in Taiwan," *USA Today*, 19 November 1999, 16.
- Thomas, Timothy L. "Like Adding Wings to the Tiger: Chinese Information War Theory and Practice," Fort Leavenworth, KS: Foreign Military Studies Office. 2000.
- Thomas, Timothy L. "Deciphering Asymmetry Word Game," in *Military Review* LXXXI (Apr 2001): 32-37.

#### Electronic Documents

Academy of Military Science and China Military Science Institute. "Useful Explorations and Important Breakthroughs - a Summary of the Views at the 'Literary Forum On Studying Deng Xiaoping Theory and Exploring the Features and Laws of Governing the Military on New Terms.'" *Jiefangjun Bao*, 1 Dec 98. 6. (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP19981229000197. 29 Dec 99.

Chen Tung-lung. "China's Guided-Missiles Are Replaced by 'Thermobaric Warheads' That Has Changed the Traditional Weapon" *Taipei ET Today*. 14 Nov 02. (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP20021120000167. 20 Nov 02.

Cheng Guangzhong and Chen Zhou. "China Resolutely Defends Its Fundamental Interests as a Matter of National Defense – Interpreting 'China's National Defense in 2002'" *Zhonguo Guofang Bao*. 17 Dec 02. 4. (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP20021217000057. 17 Dec 02.

Department of Defense. "Annual Report on the Military Power of the People's Republic of China." <http://www.defenselink.mil/news/Jul2002/d20020712china.pdf>. Jul 02 [Mar 03].

Dong Wenxian. "Changes in Today's Strategic Air Territories" *Beijing Jiefangjun Bao*. 08 Oct 02. 6. (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP2000021008000036. 08 Oct 02.

Du Runan and Shang Debiao. "To Draw Upon, Synthesize and Create - Brief Talk on Military Innovation Methods." *Jiefangjun Bao*, 24 Nov 98. 6. (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP19981215000329. 15 Dec 98.

Dy, Kapil Kak. *Revolution in Military Affairs—an Appraisal*. <http://www.idsa-india.org/an-apr-01.html>, 2000. [15 Dec 02].

Fan, Yinhua. "Contemporary Military Revolution and New Thinking Modes." *Jiefangjun Bao* 1998. 6. (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP19980415000256. 15 Apr 98.

Federation of American Scientists. People's Liberation Army Navy. <http://www.fas.org/man/dod-101/sys/ship/row/plan/index.html> [5 Mar 2003].

Fu, Quanyou. "Fu Quanyou on Military Reform." *Beijing Qiushi* 6 (1998): 2-6 (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP19980403001137. 3 Apr 98.

- Globalsecurity.org. "Taiwan Strait 21 July 1995 to 23 March 1996."  
[http://www.globalsecurity.org/military/ops/taiwan\\_strait.htm](http://www.globalsecurity.org/military/ops/taiwan_strait.htm). 19 January 2002  
 [15 Jan 03].
- Guo Chunxiang. "Adopt a Scientific Outlook on Superior Weaponry versus Inferior  
 Weaponry" *Zhongguo Guogang Bao*. 6 Jan 03. 3. (Accessed at  
<https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document  
 ID CPP20030206000065. 6 Feb 03.
- Hawkins, Charles F. "Four Futures: Competing Schools of Thought inside the PLA."  
<http://taiwansecurity.org/IS/IS-0300-Hawkins.htm>. [25 Oct 02].
- He Xin. "America's New 'National Security Strategy' and the Current International  
 Situation" *Beijing Neibu Canyue*. 13 Sep 02. No. 35. 2-12 (Accessed at  
<https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document  
 ID CPP20021212000213. 12 Dec 02.
- Hu Pingjun. "Analysis of US Army's 'Asymmetrical Operations'." *Jiefangjun Bao*, 21  
 Sep 99. (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-  
 CHI Online Document ID CPP19991105000392. 5 Nov 99.
- Jia Weidong. "Asymmetrical War and Smart War -- The Developing Trends of Future  
 War from a Kosovo Perspective." *Jiefangjun Bao*, 1999. 6. (Accessed at  
<https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document  
 ID CPP19990510001823. 10 May 99.
- Kang Hengzhen. "Article on Asymmetrical War Strategy, US Forces' Application of  
 strategy in Combined Operations" *Beijing Zhongguo Junshi Kexue*. 20 Jun 02. 70-  
 76 (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI  
 Online Document ID CPP20030306000241. 6 Mar 2003.
- Lague, David and Susan V. Lawrence. "In Guns We Trust." in *Far East Economic  
 Review*. <http://www.cdi.org/russia/234-7.cfm>. 12 Dec 2002 [25 Jan 03]
- Li Desheng. "A Shift in China's Strategy for Building Armed Forces Shows New  
 Evaluation of World Situation" in *Ta Kong Pao*. p1 FBIS-CHI 18 Feb 1986. W12.
- Li Bingyan and Zhang Feng. "Forum Views Challenge of Military Revolution."  
*Jiefangjun Bao*, 2 Jan 96. (Accessed at  
<https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document  
 ID CPP19960102000004. 2 Jan 96.
- Ma Ling, "Commentator View US Actions in FRY War." *Ta Kong Pao*. 17 May 99. A4.  
 in FBIS-CHI Online Document ID CPP19990518002048. 18 May 99.

- Ministry of Foreign Affairs. *China's National Defense in 2000*.  
<http://fas.org/nuke/guide/china/doctrine/cnd0010/china-001016wp.htm>. 16  
 October 2000 [5 Mar 03].
- Ministry of Foreign Affairs. *White Paper on China's National Defense*.  
<http://fas.org/nuke/guide/china/doctrine/natdef2002.html> [5 Mar 03] 9 Dec2002.
- Pillsbury, Michael. "China's Military Strategy Towards the US: A View From Open  
 Sources." <http://www.uscc.gov/strat.pdf>. 2 Nov 2001 [12 Dec 02]
- Qing Tong. "Analysis of the Strength of Missiles on the Two Sides of the Strait" *Hong  
 Kong Kuang Chiao Ching*. 16 Dec 02. 42-45. (Accessed at  
<https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document  
 ID CPP20021218000070. 18 Dec 02.
- Rawski, Thomas G. 29 August 2002. *Measuring China's Recent GDP: Where Do We  
 Stand?*. <http://www.pitt.edu/~tgrawski/papers2002/measuring.pdf>. 24 September  
 2002 [15 Jan 03].
- Rumsfeld, Donald. "Secretary Rumsfeld Speaks on '21st Century Transformation' of US  
 Armed Forces (transcript of remarks and question and answer period)."  
<http://www.defenselink.mil/speeches/2002/s20020131-secdef.html>. 2001 [15 Nov  
 02].
- Scobell, Andrew. "Show of Force: The PLA and the 1995-1996 Taiwan Straits Crisis."  
<http://www.ciaonet.org/wps/sca03/sca03.pdf>. January 1999 [22 Jan 03].
- Swaine, Michael. August 1998. "Chinese Military Modernization and Asian Security"  
<http://www.ciaonet.org/wps/swm01/>. Apr 2002 [23 Oct 03].
- Tang Shiping. "China's Periheral Security Environment in 2010-2015 – Decisive Factors,  
 Trends and Prospects." *Beijing Zhanlue yu Guanli in Chinese*. 1 Oct 02. No. 5.  
 34-45 (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-  
 CHI Online Document ID CPP20021017000169. 17 Oct 02.
- Tie Dongfang. "What We Can Learn from Other Countries' Practice of Strengthening  
 Key Troops" *Jiefangjun Bao*. 19 March 1981. 1 (Accessed at  
<https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI 6 Apr 1988. 39-  
 40.
- US Embassy, Beijing PRC "Joint Communiqué of the United States of America and the  
 People's Republic of China." [http://www.usembassy-  
 china.org.cn/irc/policy/jtcomm2.html](http://www.usembassy-china.org.cn/irc/policy/jtcomm2.html). 17 Aug 1982 [19 Feb 2003].



- US Congress. "Taiwan Relations Act."  
<http://usinfo.state.gov/regional/ea/uschina/taiwact.htm>. 10 Apr 79 [17 March 03].
- Wang Baocun. "Information Warfare in the Kosovo Conflict" *Jiefangjun Bao*, 25 May 1999. 6. (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP19990623000599. 23 Jun 99.
- Wang Jiasuo. "Aircraft Carriers: Suggest You Keep Out of the Taiwan Strait!" *Beijing Junshi Wenzhai* 01 Apr 02. 58-59 (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP20020326. 26 Mar 2002.
- Wolff, Jim. "China Aims 75 More Missiles a Year at Taiwan" in *Reuters* 21 Feb 2003.  
<http://taiwansecurity.org/Reu/2003/Reuters-022103.htm>. [28 Feb 03].
- Wu Jianguo. "Can Information Wapons Replace Nuclear Weapons" *Jiefangjun Bao*, 17 Nov. 1999. 5. (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP1991219000976. 19 Dec 99.
- Wu Ming-chieh. "China Increases Intelligence Collection, Takes Aerial Pictures of Taiwan" *Taipei Tzu-Yu Shih-Pao*. 5 Nov 02. 3. (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID 200211105000019. 5 Nov 02.
- www.janes.com. "World Armies, China, People's Republic." Janes Publishing Group. 17 April 2002 [17 Dec 02].
- Xu, Dexin. "Military Photelectronics Technology" *Kexue Shibao*. 16 Jun 1999. 3.  
 (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP19990914000921. 14 Sep 99.
- Ye, Jian. "Armchair Strategy: Using a Bomb to Deal With Aircraft Carrier" *Jiefang Ribao*. 12 Feb 2000 (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP20000212000019. 12 Feb 02.
- Yoshihara, Toshi. "Chinese Information Warfare: A Phantom Menace or Emerging Threat?" <http://www.iwar.org.uk/iwar/resources/china/iw/chininfo.pdf>. November 2001 [7 March 2003].
- Zhu Xiaoning. "A Monopoly on the 'Asymmetrical Battlefield'" *Jiefangjun Bao*. 23 Nov 1999. 6. (Accessed at <https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document ID CPP19991226000253. 26 Dec 99.

Zhang Feng and Li Bingyan. "Historical Mission of Soldiers Straddling the 21st Century"  
*Jiefangjun Bao* 2 Jan 1996 (Accessed at  
<https://portal.rccb.osis.gov/servlet/login/index.html>) FBIS-CHI Online Document  
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